

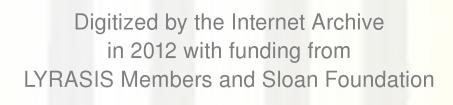
#### Draft Environmental Impact Statement



### Proposed Amendments to Regulations Governing the Taking of Marine Mammals Associated with Tuna Purse Seining Operations



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE



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#### ENVIRONMENTAL IMPACT STATEMENT

Proposed amendments to regulations governing required fishing gear and procedures to prevent and minimize the taking of marine mammals incidental to purse seine fishing for tuna beginning in 1986.

- (X) DRAFT ENVIRONMENTAL IMPACT STATEMENT
- ( ) FINAL

Responsible Federal Agency: National Marine Fisheries Service

National Oceanic and Atmospheric

Administration

Department of Commerce

Washington, D.C. 20235

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Assistant Administrator for Fisheries

#### Abstract:

The proposed action would amend the current fishing gear and procedural requirements (Appendix 1) applicable to U.S. vessels purse seining for tuna in association with porpoise in the eastern tropical Pacific (ETP) Ocean. Those requirements were established in 1981 to limit incidental take of porpoise by purse seining vessels. The amendments (Appendix 2) are intended to simplify and clarify current gear and procedural regulations to complement and achieve the objectives of the Marine Mammal Protection Act amendments of 1984. The regulations are part of a coordinated program to limit porpoise mortality by

U.S. and non-U.S. fleets, and the overall program is described. The document includes a description of the affected physical, biological, and socioeconomic environment. Impacts of the proposed action on porpoise and tuna stocks and on the U.S. tuna fleet and the tuna processing industry are described.

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Deadline for Comments:

(to be determined)

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#### I. SUMMARY

#### A. Objective

The objective of this DEIS is to identify and evaluate potential changes to current fishing gear and procedural regulations under which U.S. tuna fishermen would have flexibility to use gear and techniques to conserve and protect porpoise stocks affected by purse seine fishing in the ETP. The net effect of these amendments would be to provide continued protection for porpoise stocks while reducing the regulatory burden on fishermen. These amendments satisfy the requirements of the Marine Mammal Protection Act of 1972 (MMPA) as amended in 1984.

#### B. Proposed Action and Alternatives

 Proposed Action. The proposed action is to amend the current gear and procedural regulations to provide greater flexibility in the application of porpoise saving gear and techniques by operators and crews on U.S. vessels purse-seining for tuna in association with porpoise in the ETP.

Most gear requirements would be retained under the proposed alternative. Those gear and procedural requirements that have been found to be unworkable,

unnecessary, or too inflexible would be amended or deleted. The amendments would allow vessel operators to make on-the-spot adjustments in fishing practices to protect porpoise, with emphasis on the results rather than procedural requirements. The level of porpoise mortality is limited by the quotas established by the 1984 amendments to the MMPA (see 49 FR 46908) and is not likely to be affected significantly by these regulations. The specific amendments proposed are as follows (see Table 1 for a summary of the regulatory changes):

- a. The two speedboat limit for uncertificated vessels is maintained, but a provision is introduced to limit its application to trips involving fishing in the General Permit area. A waiver system is established to allow vessel operators or owners to obtain a waiver from the prohibition in order to transit the area with more than two speedboats.
- b. The requirement for tuna vessel operators to complete a daily marine mammal log would be dropped because these data are not being used. Observer and research data will be sufficient for NMFS.

Table 1. Summary of Regulatory Changes

Item	Current	Proposed
Speedboat limitation	Uncertificated vessels may not carry more than two speedboats	Retain; provide for waiver transit through ETP
Logbooks	Operator must maintain daily marine mammal log	Delete
Fine mesh net	Super apron installation required; gear waiver may be obtained	Allow super apron or fine mesh net system
Bunchline locations	Ourrently specified in regulations	Delete
Rubber raft, face- mask and snorkel	Specific gear requirements	Allow alternate gear, e.g., non-rubber rafts and viewboxes; convert use requirement to guidelin
Sundown set prohibition	Presently permitted by suspension of regulation	Delete language; reserve section
Use of speedboats	Requires where and when speedboats must be deployed and manned	Convert to guideline
Hand rescue techniques	Specifies at least two crew must be on platform in net to aid in porpoise release	Convert to guideline
Backdown	Presently required	Retain
Lights	Specifies that spotlight and floodlights must be used when dark	Delete specification; require sufficient light to allow full observation of porpoise release procedures and mortality
Brailing	Prohibited to brail live porpoise on deck	Broaden prohibition to prevent bringing live porpoise on deck when ortza is retrieved
Modifications	Certain deadlines for surrendering Certificates of Inclusion, etc.	Delete
Inspections	Required under variety of circumstances	Limit to be required only after any net modification
Safety panels	Specifies minimum length and location for installation	Clarify to use formula to require proportional coverage of net

- c. Technical modifications to the requirements for porpoise safety panels are proposed so that small mesh webbing will cover the same proportion of the perimeter of the backdown channel regardless of the depth of the net.
- d. Vessel operators would have the option to use either a "super apron" or a fine mesh net to minimize porpoise mortality because both systems have been demonstrated to be effective. The skill of the skipper and crew in using porpoise safety gear and procedures is the critical element in preventing mortality.
- e. Requirements for placing bunchlines at specific locations would be deleted because the specification sometimes causes problems rather than preventing them.
- f. Requirements for each vessel to have a rubber raft and at least two facemasks and snorkels would be modified to allow non-rubber rafts and viewboxes because these would be equally effective for the purpose of locating and rescuing porpoise in a seine.

- The prohibition of sundown sets would deleted and g. that section of the regulations would be reserved. Under current conditions, a sundown set prohibition would be economically infeasible for the U.S. vessels in the ETP. A sundown set prohibition would threaten the economic viability of those vessels. Preliminary data collected NMFS and Inter-American Tropical Tuna Commission (IATTC) observers indicate that new lighting systems currently being tested provide enough light to allow effective use of porpoise rescue procedures and prevent high mortality from sets extending into darkness. The need to consider measures dealing with sundown sets will be reviewed in two years, based on the results of ongoing experiments and on performance by industry in reducing mortality rates in sundown sets.
- h. Several procedural requirements specifying how and where to use speedboats, hand rescue techniques, rubber rafts, and facemasks and snorkels would be deleted. A set of guidelines would be issued to vessel operators and owners describing gear and techniques which have been

most successful in different ocean and weather conditions. The ultimate performance measure will be porpoise mortality for the fleet.

- i. A prohibition on bringing live porpoise on board the vessel during retrieval of the bow ortza would be added to the prohibition on brailing live animals to prevent incidental mortality or injury from this practice. The ortza is a section of the net assembly, and on sets in which a small amount of tuna is caught, the ortza is sometimes brought onto the vessel with fish in it.
- j. Requirements pertaining to certificates of inclusion, notification of departure, inspections and trial sets, and use of lights would be maintained but with technical amendments to provide some flexibility to address special circumstances in their application.
- Alternative 1. The current regulations would be extended indefinitely.
- 3. Alternative 2. More limiting gear and procedural regulations would be promulgated, possibly including prohibiting sundown sets and requiring additional gear.

4. Alternative 3. Less restrictive gear and procedural regulations would be implemented, allowing vessel operators additional freedom to use gear and procedures they deem most effective to limit porpoise mortality.

#### C. Environmental Impacts

#### 1. Physical environment

No change in the physical environment is expected.

#### Biological environment

The changes in gear and procedural requirements are expected to have an insignificant effect on the number of porpoise taken incidentally in the ETP tuna fishery. Tuna catch levels in the ETP will change imperceptibly and will not affect the status of tuna stocks.

#### 3. Socioeconomic environment

The changes in gear and procedural requirements will have socio-economic benefits. The principal benefit is that the regulatory requirements will be simplified and the regulatory burden reduced. Skippers will have more flexibility in the use of gear and methods to minimize porpoise injury and mortality during fishing operations. The catch of tuna will not be affected significantly, but the cost of fishing may be reduced. Most vessels already have the required gear, and no new investments would be required. The change will allow use of either a super apron or fine mesh net, and vessel owners with fine mesh nets will be free to choose whether to invest in a super apron. Elimination of the marine mammal logs will reduce the paperwork burden.

#### II. PURPOSE AND NEED FOR ACTION

#### A. Background

#### Regulatory history

A portion of the harvest of yellowfin tuna (<u>Thunnus</u> <u>albacares</u>) in the eastern tropical Pacific Ocean (ETP) involves setting large purse seine nets around schools of porpoise because yellowfin tuna often are found in close association with schools of porpoise. This operation may result in mortality of or serious injury to porpoise.

The incidental taking of porpoise by U.S. tuna vessels may be authorized by permit under the MMPA. The current permit and associated regulations (50 CFR 216; see 45 FR 72178-72196) went into effect January 1, 1981, and were scheduled to expire December 31, 1985. The regulations include quotas for the take, encirclement, and mortality of various stocks of porpoise; gear and procedural fishing requirements; an observer requirement; and restrictions on the import of tuna and tuna products from other nations whose vessels use purse seines to catch tuna in association with porpoise in the ETP.

#### 2. Porpoise mortality reduction program

This DEIS describes and evaluates alternative regulations dealing with fishing gear, fishing procedures, and administrative elements of the general permit program under which U.S. tuna vessels fish for tuna in association with porpoise in the ETP. These regulations comprise only a part of the overall U.S. and international program to minimize porpoise mortality. The overall program and the elements changed by the 1984 MMPA amendments are described in the following section to provide a context within which to view the proposed regulatory amendments.

#### a. Allowable take by U.S. vessels

The 1980 rulemaking established a cumulative mortality quota of 20,500 animals per year through the 1981-85 permit period as well as quotas for principal target species/stocks (see Table 2). Species/stocks without quotas were "prohibited"; that is, vessel operators were not allowed to set nets around porpoise schools known to include animals of these species. The "Accidental Take" regulation in effect was continued to recognize that it is not always possible to identify small numbers of prohibited species in a school prior to a set. Under this regulation, sets involving small numbers of prohibited species are not prosecuted if the agency determines that the prohibited species or stock was not reasonably observable prior to the set. Such taking has not been counted against the cumulative quota.

The cumulative quota was derived by applying a performance standard to the U.S. fleet. That is, the initial determination of the 1981-85 quota was premised on an average annual U.S. harvest of 93,000 tons of yellowfin tuna on porpoise and a

Table 2: Estimates of dolphin mortality incidental to the U.S. fleet for 1981-84

Species/Stock	1981 Quota	<u>1981</u> 1	Estimated 1982	Mortality 1983	19844
N. offshore spotted	20,500	10,551	12,047	1,819	7,629
S. offshore spotted	5,697	813	3,681	1,849	667
Coastal spotted	0	0	0	3	0
E. spinner	0	1,637	1,956	626	3,296
N. whitebelly spinner	5,321	2,175	2,284	2,618	2,555
S. whitebelly spinner	2,504	1,162	1,785	1,230	474
N. common	1,890	923	140	115	0
C. common	8,112	301	277	117	3,023
S. common	4,045	110	0	0	4
N. striped	429	22	0	0	0
C. striped	1,822	40	30	0	37
S. striped	4,095	0	445	3	4
Other/Unidentified	0	156	622	132	43
Cumulative	20,500	17,890	23,267	8,513	17,732

 $<sup>^{\</sup>mathrm{l}}$  Source: Hammond and Tsai (1983).

<sup>&</sup>lt;sup>2</sup> Source: Hammond (1984).

<sup>3</sup> Source: Hammond and Hall (In press)

<sup>4</sup> Source: Monitoring estimate (12/31/84 - preliminary).

finding that it was technologically and economically feasible to fish on porpoise with a mortality rate of .24 animals per ton. The initial quota of 22,300 porpoise was then reduced by eight (8) percent to 20,500 porpoise to account for the anticipated reduction in mortality associated with the proposed prohibition of sundown sets. Although that prohibition was suspended (see III.A.l.e.), the quota has been maintained at the discounted level, thus locking in the protection associated with the prohibition.

The 1984 MMPA amendments (P.L. 98-364) extend the cumulative mortality quota of 20,500 animals per year indefinitely. They also establish quotas for eastern spinner and coastal spotted dolphin, for which there were no quotas under the 1981-85 quota structure. All porpoise mortality will be counted against the cumulative quota, including takings of non-target species. The effect of these changes is to incorporate all mortality under the aggregate 20,500 quota consistent with the original performance standard set for the U.S. fleet in the 1980 rulemaking.

#### b. Incidental take by non-U.S. fleets

The U.S. has attempted to influence the incidental take of porpoise by non-U.S. vessels under regulations governing import of tuna caught in association with porpoise. These regulations require that a nation wishing to export tuna caught in association with porpoise to the U.S. must submit documentation indicating that the government has a regulatory program similar in substance and effect to the U.S. program to protect porpoise. The documentation must include a detailed description of the gear and procedures used to protect porpoise; the number of animals killed or seriously injured the previous year; the number which will be allowed to be killed or injured each future year; and a description of the regulatory procedures applicable to its vessels. Importation is not permitted until the Assistant Administrator for Fisheries has made a finding that the documentation demonstrates substantial conformance with U.S. porpoise saving requirements.

The 1984 MMPA amendments tighten the import documentation requirement. The government of any nation wishing to export to the U.S. yellowfin

tuna taken with purse seines in the ETP, or products from such tuna, must provide documentary evidence to the Secretary that that government of the harvesting nation has a regulatory program governing the incidental taking of marine mammals; that its program is comparable to the program of the U.S.; and that the average rate of incidental taking by the vessels of the harvesting nation is comparable to the average rate of incidental taking of marine mammals by vessels of the U.S.

The report of the Committee on Merchant Marine and Fisheries, House of Representatives, indicated clearly the intent that non-U.S. programs should provide a level of protection that is substantially equivalent to that of the U.S. Incidental taking rates will vary from year to year, but should not be consistently higher than the rates of the U.S. fleet. The NMFS is developing regulations and documentation procedures to satisfy this requirement. It is envisioned that cumulative mortality associated with non-U.S. fleets will approximate the mortality from U.S. fishing. That is, the capacity and effort by U.S. and non-U.S. vessels fishing on porpoise in the ETP, and the rates of

mortality achieved by these vessels, will be similar, although there may be differences from year to year.

This approach is consistent with the approach used to set the 1981-85 quotas for populations/stocks. Under that approach, one-half of the estimated 1979 replacement yield for each population/stock (except northern offshore spotted) was allocated to the U.S. The other half was anticipated to be taken by non-U.S. vessels. Each sector effectively was accorded equal treatment.

The total incidental taking under these conditions would not exceed 41,000 animals per year, and the taking of any individual population/stock would be held below maximum replacement yield. Each population/stock would be above its respective OSP, and taking would not be to the disadvantage of any population/stock.

#### c. U.S. and international research

The NMFS maintained a research program on abundance and distribution of porpoise and porpoise rescue gear and procedures for many

years. Most recently, the research has been directed toward estimating the status of stocks of porpoise for use in establishing future taking limits. Among the specific research topics were the distribution of species and stocks in relation to environmental and oceanographic factors; determination of vital rates including age, growth, and reproduction; and research on abundance including study of species proportions, sizes and density of schools, and the effects of various sighting factors on estimates of school size. The reaction of porpoise to the approach and presence of a vessel also was assessed.

The 1984 MMPA amendments require the Secretary to undertake a scientific research program to monitor for at least five consecutive years the indices of abundance and trends of marine mammal population stocks. The Secretary is directed to take such action as is necessary to modify incidental take quotas or gear and procedural requirements if this program demonstrates that taking under the new quota system is having a significant adverse effect on a marine mammal population stock. The NMFS is developing the details of this monitoring program.

The Inter-American Tropical Tuna Commission (IATTC) was established in 1950 principally to conduct research on the abundance and biology of tropical tunas. In 1976, the member countries agreed to consider the tuna-porpoise relationship in the ETP. The IATTC has monitored porpoise population size and mortality, has conducted gear and behavioral research and aerial surveys, and has provided educational sessions and seminars for foreign fishery officials and training for foreign observers. The IATTC translated the NMFS film, "Tuna Seining and Porpoise Safety," into Spanish and distributed the film to more than 40 foreign vessels. The IATTC observer program began fielding observers in 1979 and this voluntary observer program was the only means for placing observers from January 1, 1983 through March 25, 1984, while the NMFS mandatory observer program was in litigation.

The international program has been beneficial in protecting porpoise through increased awareness of the tuna/porpoise problem and rescue procedures. The level of observer coverage on foreign vessels has not been as high as desired, but the observations provide a useful insight into non-U.S. fleet performance. Further, the

IATTC's research on abundance and distribution of porpoise and its gear research have complemented NMFS' research program. For example, IATTC research in cooperation with the Porpoise Rescue Foundation (PRF) on the effectiveness of different lighting systems has resulted in the PRF and numerous operators purchasing a new type of lighting system deemed to be especially effective in saving porpoise after dusk (see III.A.1.e).

#### d. Industry program

Innovations by fishermen have contributed significantly to reduced porpoise mortality. Both the backdown procedure, which is the primary release technique, and the fine mesh panel, which reduces entanglement and drowning, were the result of experimentation by the industry. In the interest of encouraging additional innovations and assuring that the experience of successful fishermen is available to the whole fleet, the industry formed the Porpoise Rescue Foundation (PRF). The PRF in turn has organized and manages an Expert Skippers Panel (ESP), which consists of experienced fishing captains. The ESP has served as a peer review group to assist

captains who have experienced problems in the safe release of porpoise. The ESP reviews observer records and considers set-by-set circumstances to identify the cause of problems and possible solutions. Improved performance in terms of lower rates of kill per set, kill per ton, and percent of sets with no kill has been documented for 70 percent of the skippers who have met with the ESP. Of the 30 percent for whom improvement could not be documented, the reason in many cases was that the skipper had left the ETP fishery or shifted to a foreign flag vessel.

The ESP and PRF also have contributed by commenting on new gear ideas, NMFS porpoise research and charters, data forms, and mortality estimates and performance measures. Perhaps equally important, the PRF has provided a link between the NMFS and industry to aid in the fleet's adoption of gear and procedures under Federal regulations and to encourage cooperation rather than confrontation. This contribution is not quantifiable but is very significant. The ESP and PRF are expected to continue their activities in the future.

#### e. Observer program

The NMFS places observers who are biological technicians on tuna purse seine vessels to collect data on porpoise mortality, abundance and distribution, fishing operations, tuna catch and associated porpoise mortality. Observers also take biological measurements and collect samples for further analysis. Observers (NMFS and IATTC) are placed on 30-40 percent of all trips made each year by purse seiners holding certificates of inclusion. Data gathered by NMFS observers have been used as documentation for prosecution of violations in many instances. A legal challenge to this regulation was made in 1981. This led to a Federal District Court decision in 1981 preventing the enforcement use of observer data, and to a Ninth Circuit Court of Appeals decision in 1983, halting the mandatory NMFS observer program. In an en banc decision in early 1984, the Court of Appeals subsequently ruled that the NMFS had the authority to place observers on tuna vessels and use observer data for enforcement purposes. However, during the appeals process in 1983 and

early 1984, the NMFS relied on a voluntary placement program for U.S. vessels with a

supplemental, cooperative program through the IATTC. Because of the confidential nature of IATTC-collected data, they cannot be used for enforcement purposes.

#### B. Need for Action

The NMFS believes that experience in administering and enforcing the current regulations demonstrates the need to modify those that have been found to be too restrictive or unworkable. While many, if not most, of the current regulations would be effective in the majority of cases, they could be inappropriate in specific instances. The NMFS has found that the large number of variables in a specific set of a purse seine net cannot be accommodated in detailed and specific regulations applicable to all sets. This leads to two problems. First, innovation by vessel operators and crew is stifled by the detail in the current regulations. In this context, it is notable that such measures as backdown and the fine mesh net were the result of industry efforts to deal with porpoise mortality problems. The current regulations, however, do not encourage experimentation with new techniques or gear to respond to unusual situations or problems in a particular set. The NMFS believes it would be better to allow some flexibility for vessel operators to use porpoise saving gear

effectively and efficiently, recognizing that the skill of skipper and crew is more critical than many of the detailed regulations.

Second, a considerable amount of government and industry time is now spent reviewing each observer's trip data in great detail. The record must be examined in detail to assess the seriousness of any violations and the appropriate penalty (if any). Such examinations have shown many instances in which apparent violations either were justified because of factors not anticipated or covered by the regulations, or resulted in no injury or mortality of marine mammals. Without regulatory amendments, however, government and industry representatives are locked into adversarial positions that may lead to a focus on the specific acts rather than on the circumstances and the results. The NMFS believes that with modification of some regulations, less time and effort will be needed to enforce and prosecute effectively.

The 1984 MMPA amendments as well as those in 1981 demonstrate Congressional confidence in the U.S. tuna industry's ability to achieve and maintain reduced levels of porpoise mortality in the ETP fishery. The record of progress by the industry shows that this confidence was warranted, and the NMFS believes that this progress warrants an easing of the regulatory burden, with emphasis on the overall effectiveness of the program to reduce porpoise mortality rather than on the detail of the

regulations. With a performance-oriented regulatory regime, relying on quotas and gear requirements, it can reasonably be expected that the U.S. fleet can maintain or improve upon the success already attained.

#### C. Relationship to Other Documents and Laws

This document is intended to satisfy the requirements of the MMPA, the National Environmental Policy Act (NEPA), and the Regulatory Flexibility Act. The draft EIS includes a description of the problem(s) addressed; a description of the components of the natural and economic environment which are affected; an evaluation of beneficial and adverse effects of alternative courses of action on the physical environment and economic units; and an assessment of the net benefits to society from the preferred action and alternatives. Section XI summarizes the pertinent statutory or regulatory findings.

#### D. Objectives

The objectives of this draft EIS are: (1) to provide information on the effects of alternative changes in the regulations governing fishing gear and practices and administrative requirements with respect to the General Permit for the incidental take of porpoise in purse seine fishing for

tuna in the ETP; and (2) to solicit comments from interested agencies and the public on the proposed amendments to these regulations.

#### III. PROPOSED ACTION AND ALTERNATIVES

The proposed action is to amend the regulations for the take of marine mammals incidental to commercial tuna purse seine operations (50 CFR \$216.24). The proposed amendments would set conditions that apply to vessels fishing under the General Permit. The NMFS also will issue a set of guidelines to replace some of the current regulations.

#### A. Proposed Action

The proposed amendments can be divided into three categories:

(1) procedural requirements; (2) gear requirements; and (3) administrative and technical requirements.

#### Procedural requirements

Several procedural requirements would be deleted to provide fishermen with greater flexibility in taking measures to release porpoise encircled in the net.

These requirements will be incorporated into an advisory document with guidelines concerning the most effective use of porpoise saving gear and techniques. This

document would use the results of many of the investigations of the ESP (see II.A.2.d.) into the causes of and effective responses to the types of problems that arise under different fishing conditions. The guidelines also would be based on the results of NMFS and IATTC gear research and observers' records. The intent is to provide vessel operators with useful information on porpoise-saving techniques and let the vessel operator decide what will be most effective for his vessel under different fishing conditions. Industry has shown its ability to develop new porpoise-saving techniques and gear, and the deletion of some procedural regulations should encourage further innovation.

Even though specific procedural regulations are being deleted, skippers still will not be permitted to brail live marine mammals. Under the proposed regulations, they will be required to remove all live marine mammals from the net before brailing and before bringing any fish aboard the vessel when retrieving the ortza in sets in which a small amount of tuna was taken. However, the regulations will be changed to allow a skipper more flexibility in deciding how to get all of the live marine mammals out of the net before he brails the fish on board. Total and species/stock mortality and mortality rates, monitored through the observer program,

will be the ultimate measures of performance for the fleet as a whole. Operators of vessels having sets with unusual problems will be referred to the ESP, as has been done in the past several years. The guidelines will permit skippers to respond to unusual conditions with innovative actions without fear of prosecution for procedural violations.

The procedural requirements that would be deleted or modified are as follows:

#### a. Use of speedboats (216.24(d)(2)(vii)(A))

The regulation now stipulates that two speedboats equipped for towing on the net must be immediately available, with at least one boat manned and in the water. This regulation is unnecessarily restrictive. Not all sets require towing on the net. Crewmen need not be precluded from working on other tasks when towing is not necessary. It should be up to the skipper to determine whether and when to have one or more speedboats available and manned to facilitate backdown and prevent porpoise mortality. Therefore, the NMFS proposes to delete this speedboats are used in virtually all sets (almost

98 percent in 1982) to tend bunches or to be prepared to tow to prevent net collapse and other problems in backdown. Speedboats also are used to tend bunches both on schoolfish sets and on porpoise sets. The use of speedboats will be covered in the guidelines document.

#### b. Hand rescue (216.24(d)(2)(vii)(C))

This provision requires that a minimum of two rescuers shall aid in the release of marine mammals during backdown and that a minimum of two rescuers shall hand release any live marine mammals in the net after backdown. Hand release often is necessary to help porpoise out of the net during backdown and to remove stragglers after backdown. In many cases, two rescuers are not enough and vessel skippers assign more than two crew members to the task. At other times, however, hand rescue may not be necessary, or one crew member will be enough to carry out hand rescue procedures. The NMFS proposes that this regulation be deleted and that hand rescue procedures be dealt with in the guidelines. This will permit the vessel operator full flexibility to deploy the number of crew and type of gear necessary to release porpoise from the net with

due regard to sea state, weather, lighting, crew safety, and other variables. It is in the skipper's interest that all live animals be rescued as quickly as practicable. The regulations prohibit bringing any live animals onto the vessel and prohibit brailing of live animals. Therefore, the skipper must make sure the crew does what it can to get all animals out of the net so the catch can be brought onto the vessel and fishing can resume. The skipper is likely to rely heavily on hand rescue as the most effective means to satisfy the other provisions of the regulations.

## c. Use of rubber raft, facemask, and snorkel (216.24(d)(2)(vii)(E))

This provision specifies when and how to use a raft, facemask and snorkel to determine whether there are live animals in the net and if so, to "make every effort to remove them" before backdown is finished. This provision is more detailed and specific than is necessary. The general requirement prohibiting bringing a live animal on board and to make an earnest effort to prevent mortality imposes the obligation to take measures to identify and remove marine mammals

from the net during and after backdown. This may include but does not necessarily require the use of a raft, mask or snorkel as specified. There are times when use of these items may be unsafe due to rough seas, darkness, or the presence of sharks. The NMFS proposes that this requirement be deleted. The use of rescue platforms and underwater viewing devices will be covered in the guidelines.

## d. Prohibited brailing of live animals (216.24(d)(2)(vii)(F))

This section requires that release procedures continue until all live animals are removed from the net prior to brailing, and prohibits brailing live animals from the net. Brailing of live porpoise does not occur frequently; it has been recorded only on 1.2 percent of all observed sets since 1976. Nonetheless, brailing is likely to cause serious injury to or death of live porpoise. Therefore, this provision will be retained. However, it will be transferred from the procedural regulations section to the "General Conditions" (216.24(d)(2)(11)). The

provision also will be broadened to prohibit bringing live animals aboard the vessel during ortza retrieval (see 3.b. below).

# e. Prohibited setting at sundown (216.24(d)(2)(vii)(G)) and use of lights (216.24(d)(2)(vii)(H))

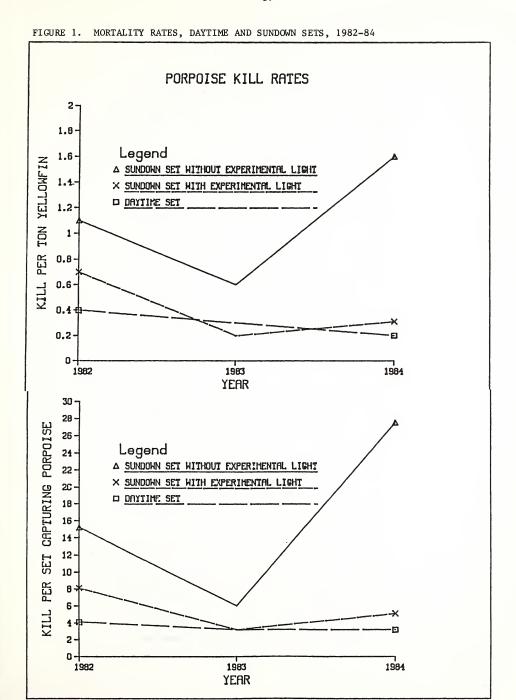
The regulations as promulgated in 1980 prohibit the release of the net skiff later than 90 minutes before sunset (local time) on every set involving marine mammals and specify the type of lights and the manner in which they should be used if backdown or other release procedures continue past one-half hour after sunset. The purpose of the "sundown set" prohibition was to prevent sets that were almost certain to extend into periods of darkness, when porpoise could not be seen in the net. There was evidence that mortality per set had been much higher on such sets than on daytime sets. In the 1977-1980 period, 8.2 percent of all observed sets were sundown sets accounting for 27.9 percent of the total mortality. Similarly, in 3.1 percent of the daytime sets, but in 13.2 percent of sundown sets, more than 15 porpoise were killed per set (PRF, unpublished data).

The tuna industry protested the regulation to the Administrator, NOAA, on economic feasibility grounds. The industry argued that the prohibition would result in serious economic losses due to longer fishing trips and/or substantial reductions in tuna catches. Almost nine percent of total tuna catch in the 1977-1980 period was caught in sundown sets. The industry said that loss of this catch could not be made up by increased school or log fishing. It also was argued that the problems of higher mortality could be resolved by using special arrays of lights and other procedures.

In response to these concerns, the NMFS suspended the regulation until a comparative analysis of porpoise mortality in daytime and sundown sets could be completed (46 FR 2153, January 8, 1981). The completion of this decision-making process was preempted by the decision from <a href="Balelov.Baldrige">Balelov.Baldrige</a> that the NMFS could not use observer data to prosecute violations of the regulations. The NMFS did not take action to reinstitute the sundown prohibition during the appeal of the <a href="Balelo">Balelo</a> decision because there was no means of enforcing that or any other

regulatory provision. Further, the industry (as well as the IATTC) was investigating ways to overcome the mortality associated with darkness, notably the use of new lighting systems.

Powers (1979) provided some evidence that vessels using lights after sundown had lower porpoise mortality rates than vessels not using lights. Bratten (1984) has shown that the vessels with the kind of high-powered floodlights used in experiments by IATTC in 1982 and 1983 experienced lower mortality rates than vessels using other lights in the same period. The IATTC (1984a) has reported that the mortality rate for vessels using these new lights has been 7.46 per set (68 sets), about 34 percent lower than the rate of 11.38 per set (912 sets) for dark backdown sets using other lights. Data from the PRF appear to confirm the IATTC results. For each of the three years for which test results are available, the mortality per set and mortality per ton were much lower for sundown sets with experimental lights than for sundown sets with the "old" lights. The results are graphically compared in Figure 1. Due to the relatively small sample, these results do not establish with certainty that the new lights will be equally effective for all vessels



and all sets. However, there have been many positive comments from skippers, crew and observers who have been able to compare the effectiveness of the new lights with the older light systems.

It also should be emphasized that the cumulative annual mortality quota set in 1980 effectively was based on a performance standard for the U.S. fleet, including a prohibition of sundown sets. An initial quota was of 22,320 porpoise was derived by projecting that the U.S. fleet would catch 93,000 tons of yellowfin on porpoise with a mortality rate of .24 animals per ton of tuna. This rate was chosen to reflect the continued use of the best marine mammal safety techniques and equipment that are economically and technologically practicable. In his 1980 decision, the Administrator, NOAA reduced this quota by 8.5 percent to 20,500 animals per year to reflect the anticipated reduced catch of tuna, and the lower mortality of porpoise associated with tuna, due to the prohibition of sundown sets (see NOAA Administrator's Decision, October 21, 1980, in NMFS, 1980). While the sundown set prohibition has been suspended, the mortality

quota has remained at this lower level, effectively locking in the protection intended by the prohibition.

The U.S. fleet would be severely affected by a sundown set prohibition. About 10.6 percent of all yellowfin taken with porpoise on 1981-1984 observed trips was taken in sundown sets. Assuming the observed fleet catch is representative of the entire U.S. fleet, approximately 5,700 tons of yellowfin were taken each year on sundown sets. At a current price of \$850 per ton (assuming a mix of medium and large fish), average revenue attributable to this harvest is almost \$5 million. This revenue would be foregone if sundown sets were prohibited. This does not include costs associated with fishing opportunities which are lost when the chase of a school of tuna associated with porpoise takes so long that the set of the net would be precluded. In the 1980 rulemaking, the industry pointed out that the average chase period is 80 minutes meaning the prohibition on setting within 90 minutes of sundown could effectively preclude porpoise fishing for as much as 170 minutes (almost three hours) before sundown on the average.

Another way to assess the adverse impact of a sundown set prohibition on the fleet is to estimate the cost of added fishing time necessary to achieve the same catch as if sundown sets were permitted. If the time available for fishing in the average day is reduced by about 12 percent (1.5 hours out of 12 hours), the number of days fishing must increase 12 percent to achieve the same catch, assuming equal catch rates. If the average vessel spends 250 days at sea, the vessel would have to spend 280 days at sea to make the same catch. Two primary cost components increase dramatically. The added fuel use would be 67,500 gallons per vessels (30 days X 2,250 gallons per day) at a cost of about \$55,000 (assuming \$.80 -.82 per gallon). The added crew supply cost would be about \$7,200 (30 days X 16 crew members X \$15 per day for food, etc.). Assuming a fleet of 60 certificated vessels, the total additional cost would be about \$3.75 million, not including any costs of additional operating capital. As a practical matter, most active vessels do not have 30 days of otherwise idle time which could be used for additional daytime fishing to make up for lost sundown set catches. The relevant measure of impact for such vessels is the lost revenue.

The NMFS proposes to continue indefinitely the suspension of the prohibition of sundown sets. A prohibition of such sets cannot be justified under the 1984 MMPA amendments, which establish quotas as the principal control. Those quotas incorporate the reduced mortality that would have been associated with sundown sets as originally proposed in 1980. In NMFS' view, a prohibition of sundown sets also would be economically infeasible under current fishery conditions. The losses that would accrue under a prohibition would be sufficient to threaten the economic viability of the U.S. vessels in the ETP.

In addition, the NMFS must acknowledge the progress being made by the industry in cooperation with the IATTC to reduce mortality rates in sundown sets. As noted earlier, the PRF and IATTC have initiated an experimental program to install new lighting systems on U.S. and non-U.S. vessels to determine if these lights are useful in reducing mortality rates. The IATTC has 10 sets of lights on loan; the PRF has four. In addition, lights have been installed on seven U.S. vessels. About one-third of all trips are being made with these lights. The current

sample is too small to allow a determination with certainty that the lights would be equally effective for all vessels, although the preliminary results are encouraging. However, by the end of 1986, when the IATTC and PRF experimental program is complete, the NMFS expects the data base will permit such an evaluation.

The NMFS proposes, therefore, that there be no new gear or procedural requirements with respect to sundown sets. The present specification of the types of lights with which vessels must be equipped and their manner of use would be deleted, and the emphasis would be on the need for vessels to have sufficient light to illuminate the backdown channel so that porpoise release procedures can be observed and mortality can be monitored (see 2.g. below).

The NMFS will continue to work closely with the PRF and IATTC in analyzing the effectiveness of the new lighting system. At the end of the experimental program, the NMFS will consider the need for changes in the gear or procedural regulations or in the guidelines to ensure that the best economically and technologically

feasible gear and techniques, including the most effective lighting systems available, are being used.

The NMFS believes this approach is consistent with the Congressional intent in the 1984 MMPA amendments. The mortality quotas will constitute the principal standard for fleet performance. As noted (see II.A.2.a.), the quota incorporates the protection associated with the prohibition of sundown sets. The 1984 amendments affirmed Congressional intent that all mortality count against the cumulative quota, including mortality of eastern spinner, coastal spotted, and nontarget species of porpoise. The U.S. fleet will be required to stay within the cumulative quota and species/stock quotas to ensure that all species/stocks remain above their OSP. The U.S. fleet has shown its ability to experiment with and adopt new equipment and techniques, including the new lighting systems which show some promise in reducing mortality rates as well as absolute mortality. It would be premature to require installation of the new lights without more information documenting their effectiveness. The option to impose additional requirements in the future will remain open as new information becomes available.

It also must be recognized that the adaptation of the new lighting systems would be an effective way to encourage non-U.S. fleets to achieve reduced porpoise mortality rates. Some non-U.S. vessels already have the new lighting systems. If it can be demonstrated that these are effective, additional installations are likely on vessels from nations seeking certifications for exporting purse-seine-caught tuna to the U.S. Installation of such lights would demonstrate their progress toward reducing porpoise mortlaity rates. A prohibition of sundown sets is not likely to be adopted by non-U.S. fleets without clear evidence that this is the only way to prevent unacceptable levels of mortality.

#### Gear requirements

Most of the current gear requirements would be retained, but some technical modifications would be made for flexibility and clarity and to respond to new conditions or information.

## a. Speedboats (216.24(a)(2))

This regulation stipulates that an uncertificated vessel (i.e., not operating under the ATA General Permit and a certificate of inclusion) which uses purse seine gear to catch yellowfin shall not carry more than two speedboats. The purpose is to discourage uncertificated vessels from fishing on porpoise. The regulation generally is effective in preventing unauthorized setting on porpoise (and thus reducing mortality) because at least three speedboats are usually necessary to herd porpoise.

However, the regulation also prevents vessels that fish in the central and western Pacific (beyond the regulatory area) from carrying more than two speedboats, even if only transiting the regulatory area. This may reduce the ability of a vessel to fish efficiently in these waters, where tuna are not caught on porpoise. It is proposed to amend this regulation to limit its application to only those areas covered by the General Permit and to provide a procedure for a vessel operator or owner to request a waiver from

the restriction if the vessel is only to transit through the permit area. The waiver would specify the terms and conditions of the waiver.

# b. Porpoise safety panels (216.24(d)(2)(iv)(A) and (B))

These sections specify the required minimum length dimensions of safety panels in relation to the depth of the net. These lengths were set to cover the perimeter of the backdown channel with small mesh webbing. The minimum requirement of 180 fathoms of safety panel for Class III vessels was established in relation to the stretched depth of the average nets being used when the regulation was implemented in 1976. These vessels now use deeper nets, and the safety panels for Class III seiners need to be lengthened to ensure that the backdown channel is covered in the same degree as for Class II vessels. Therefore, a technical change to this provision is proposed to that effect. At the same time, the specification of the point at which to begin installation of the safety panel is of limited practical use since every net is

slightly different and may respond differently at sea. The location of the safety panel can be described adequately in the guidelines.

## c. Porpoise apron (216.24(d)(2)(iv)(C) and (D))

These sections specify in considerable detail the dimensions, mesh size, and installation of super aprons in purse seine nets and require approval by a NMFS representative of the installation and testing of the apron as well as requiring reinspection and additional trials each time a super apron is reinstalled or the net is altered.

These sections would be deleted. Available evidence indicates widely varying effectiveness of super apron and fine mesh systems to prevent entanglement of porpoise. Some vessels had lower mortality rates with fine mesh panels while other vessels had lower rates with super aprons. It appears that the skill of the vessel operator and crew is the critical factor. Deletion of the super apron requirement is appropriate so the vessel operator and owner can choose the system which they think will be most effective for reducing porpoise mortality.

The requirement for NMFS "approval" of a super apron would no longer be necessary. The requirements for annual vessel inspections and reinspections (216.24(d)(2)(v)(A) and (B)) after any net modifications would be retained. Thus, if a vessel now has a super apron and removes the apron following the elimination of the requirement, the vessel's fine mesh system would be subject to reinspection.

#### d. Bunchlines (216.24(d)(2)(iv)(H))

This section specifies the manner in which bunchlines should be arranged in relation to towing points. This was initially conceived as an aid in keeping the net open once a porpoise set was made. The available evidence, however, indicates that bunchlines may create problems in sets in which towing occurs. There have been many complaints of fouling and ripping of the net as a result of entangled bunchlines. In many cases, the specified towing points are not being used; operators usually tow in the area of the net where a problem arises, and some use the towing points only if they are near the trouble area. A review of observer data suggests there

is no significant difference in mortality rates for vessels using and not using the specified bunchline arrangement and towing points.

Therefore, it is proposed that this provision be deleted from the regulations and be covered in the guidelines.

This section also specifies that at least a 20fathom length of corkline remain free of
bunchlines at the apex of the backdown channel.
This is intended to ensure that the area where
porpoise are being helped over the corks will be
clear of any obstacles and to prevent
entanglement in lines. This requirement will be
retained but it will be incorporated into the
section dealing with porpoise safety panels (see
2.b. above).

# e. Rubber raft (216.24(d)(2)(iv)(J))

This regulation specifies that an inflatable rubber raft must be carried by all certificated vessels. The specification of rubber as the material for the raft is unnecessarily restrictive and would be deleted.

#### f. Facemask and snorkel (216.24(d)(2)(iv)(K))

This regulation requires all certificated vessels to carry at least two facemasks and snorkels.

These are used to determine if any porpoise remain in the net after backdown. This purpose can be served by viewboxes as well as masks, as proposed in the technical amendment.

#### g. Floodlights and spotlight (216.24(d)(2)(iv)(L))

This regulation specifies the types of lighting and their use in sets in which backdown or other required release procedures continue more than one-half hour after sunset. The purpose of this requirement is to ensure that, if a set extends into hours of darkness, there will be sufficient light to observe the backdown procedure and other porpoise release procedures and to monitor mortality. The specification of the kinds of lights (i.e., floodlights and a spotlight) needed is too restrictive at this time and this measure would be deleted.

New lighting systems are being tested which appear to show promise as being more effective than the floodlight and spotlight combination now required (see 1.e. above). The proposed amendment to the "Use of Lights" provision (Sec. 216.24(d)(2)(vii)(H)) emphasizes the requirement to use sufficient light to observe the fishing operation and release procedures and to monitor mortality without specifying how that light is to be provided. This will allow continued experimentation and data collection on the effectiveness of alternate types of lighting systems. The need to require specific types of lights will be considered in the context of the reevaluation of the sundown set provision in two years (see III.A.1.e.). Therefore, the specification of types of lights is proposed to be reserved.

## 3. Administrative and technical requirements

These proposed amendments would simplify permit administration.

# a. Notice to surrender certificate of inclusion (216.24(c)(1))

This section requires a five (5) day advance written notice before a vessel certificate holder may surrender his certificate. The five day

notice is not necessary for monitoring fleet activity and would be deleted.

## b. General conditions (216.24(d)(ii))

This section requires that vessel operators shall not set on marine mammals when conditions of wind, sea state, or other factors would prevent the effective use of porpoise rescue procedures. This is easier to assess in hindsight than it is to predict prior to a set. The NMFS proposes to change this section. The amendment would delete the sentence dealing with prevailing conditions. This section would emphasize the responsibility of the vessel operator to return captured marine mammals immediately to the environment and to make an earnest effort to prevent mortality or serious injury. The guidelines will provide additional information on the types of conditions under which setting on porpoise would be hazardous to the animals.

As noted previously, this section also would be amended to prohibit bringing any animals onto the deck during ortza retrieval, and the prohibition on brailing live animals will be retained.

### c. Marine mammal logs (216.24(d)(2)(ii)(C))

This section requires that operators of certificated vessels maintain and submit daily marine mammal logs, and it would be deleted. The requirement was intended to provide data on the location of the fishery, number and rate of porpoise mortality, and tons of yellowfin caught with porpoise. However, there is no ongoing research or analysis using these logs, and there is no way to determine the accuracy and precision of the logs submitted from unobserved trips.

Observer logs and the research and monitoring program mandated by the MMPA amendments are expected to provide the data needed to monitor mortality and population trends, and marine mammal logs are unnecessary.

# d. Waiver from definition of "trip" (216.24(d)(2)(iii)(A))

This section (among other things) establishes a definition of a "trip" for the purpose of determining when a vessel's obligation to carry an observer has been met. This was adopted from an IATTC trip definition for its yellowfin

regulatory program and provides a standard for the fleet. There is a provision, however, for a waiver from the definition. The waiver must be asked for in writing at least ten (10) days in advance. The 10-day notice provision has not been limiting in the past, is unnecessarily restrictive, and would be deleted.

## e. IATTC notice (216.24(d)(2)(iii)(C))

Because there is no active IATTC regulatory program, this provision would be deleted.

# f. Failure to pass inspection (216.24(d)(2)(v)(C))

An amendment to this provision would emphasize that a certificated vessel that fails to pass an inspection may not fish under the ATA general permit until the deficiencies have been corrected. NMFS will make authorized inspectors available to assist in this determination.

#### B. Alternative 1 - No Action

Under this alternative, the current regulations would be extended without change indefinitely with the General Permit and quotas mandated by Congress. Efforts would continue to

improve the data base for considering regulatory changes in conjunction with the research and monitoring program to be carried out under the MMPA amendments.

#### C. Alternative 2 - More Stringent Controls

This alternative would impose more limiting gear and procedural regulations than now exist. Examples of possible amendments are as follows:

More detailed and limiting procedures could be established, such as implementing the prohibition of sundown sets.

More specific gear requirements or performance standards could be imposed, such as specifying that floodlights and spotlights have a minimum lighting capability.

Additional administrative requirements could be established, such as requiring that vessels file additional data on fishing operations and conditions.

### D. Alternative 3 - Less Stringent Controls

This alternative would further reduce the amount and extent of gear and procedural regulations to provide maximum flexibility to vessel operators to use such gear and techniques as they deem suitable to protect porpoise while purse seining for yellowfin. The types of changes that could be in this category include the following:

All procedural requirement except backdown could be deleted.

Gear requirements could be reduced, such as deleting the limitation on the number of speedboats which an uncertificated vessel may carry.

Administrative regulations could be further reduced, such as amending the definition of a "trip" so that a trip of shorter duration or making a landing of less tuna would qualify as a full trip for the purpose of satisfying the observer placement requirement.

### E. Alternatives Which Were Not Considered

Several alternative actions were proposed by the public during the scoping period for the EIS as originally planned. As a result of the 1984 MMPA amendments, the scope of the EIS has been narrowed significantly, such that some of the actions proposed by the public are not within the discretion of NMFS to consider or simply are not feasible. These include:

#### 1. Prohibiting purse seining on porpoise

Several persons proposed that NMFS consider prohibiting sets on porpoise and requiring a shift to baitboat, school-fish, or longline fishing. The 1984 MMPA amendments reflect Congressional intent to permit continuation of purse seining on porpoise, recognizing the progress made in reducing porpoise mortality. Also, purse-seine vessels are not suitable for conversion to longline or baitboat tuna fishing. Prohibiting purse seining would impose large financial losses on owners and probably would lead to transfers to foreign fleets. U.S. processors would lose a reliable supply of, yellowfin tuna, and employment for U.S. crews and processors would likely drop substantially. This alternative is not proposed because it is economically infeasible and is inconsistent with Congressional intent.

# 2. Financial relief to U.S. industry

It was suggested that NMFS might better protect porpoise by providing grants to the industry rather than allowing fishing on porpoise. Congress has neither authorized nor funded such grants and it is not likely that authority and funding would ever become available.

## Aggregation devices

One person proposed that the U.S. Government pursue new techniques of using fish aggregation devices (FADs) in the yellowfin areas to congregate tuna as an alternative to fishing on porpoise. It is known that floating objects will attract and hold tuna, but it is economically impracticable to cover the regulatory area (about 6.5 million square miles) with such devices. The cost of a large scale shift in this direction would be prohibitive, and it is unlikely that tuna catches (especially yellowfin) could be maintained under this approach.

#### IV. DESCRIPTION OF THE AFFECTED ENVIRONMENT

#### A. Ecosystem

The ETP covers approximately 6.5 million square miles and roughly corresponds to the boundaries of the general permit area, from 30° north to 30° south latitude and east of 160° west longitude. The ETP is an area of high productivity and is the habitat for many species including tuna and porpoise. The major tuna species found in the area are yellowfin, skipjack (Katsuwonus pelamis), and bigeye (Thunnus obesus). The ETP appears to be the only area in the world where tuna and

porpoise are frequently found in close association. Studies of the physical oceanography of the ETP as well as other portions of the Pacific Ocean describe the following key points:

- Major currents, especially in the vicinity of the equator, may serve as general boundaries for the range of certain porpoise stocks; and
- The average depth of the thermocline in the ETP is markedly shallower (usually less than 50 meters) than the average depth of the thermocline in the western Pacific (150 to 200 meters) (Sverdrup et al., 1942). This contrast is significant because the shallow thermocline serves as a barrier which prevents tuna from diving deep to escape an unpursed net. This constraint is used to tactical advantage by fishermen.

More detailed descriptions of the ETP may be found in the literature, e.g., Bennett (1963), Blackburn (1965, 1966), Blackburn and associates (1962), Fleming (1935), Forsbergh (1963), Forsbergh and Joseph (1964), and Forsbergh and Broenkow (1965) (cited in NMFS, 1977).

# B. <u>Tuna-Porpoise Relationship</u>

In the ETP, the United States tuna purse seine fleet catch consists of six tuna or tuna-like species: yellowfin,

skipjack, bigeye, bluefin (Thunnus thynnus), black skipjack (Euthynnus lineatus), and bonito (Sarda chiliensis). These species are captured either: (a) in association with schools of porpoise, (b) in association with floating objects (i.e., logs, debris, or other flotsam), (c) in association with whales or whale sharks, or (d) as pure tuna schools. When tuna are caught in the absence of porpoise, the term "school fishing" or "log fishing" is used. Conversely, when tuna are taken in association with porpoise, it is called "porpoise fishing" (NMFS, 1977). Only yellowfin are taken in large quantity in association with porpoise.

The association of offshore spotted and whitebelly spinner, the two major target stocks of porpoise, with yellowfin tuna in the ETP may be due in large part to similar feeding habits (Alverson, 1963; Perrin et al., 1973 as cited in NMFS, 1977). Field observations indicate that tuna that swim in association with porpoise tend to be larger fish. Smaller tuna tend to swim in schools unassociated with porpoise or flotsam and in waters closer to shore.

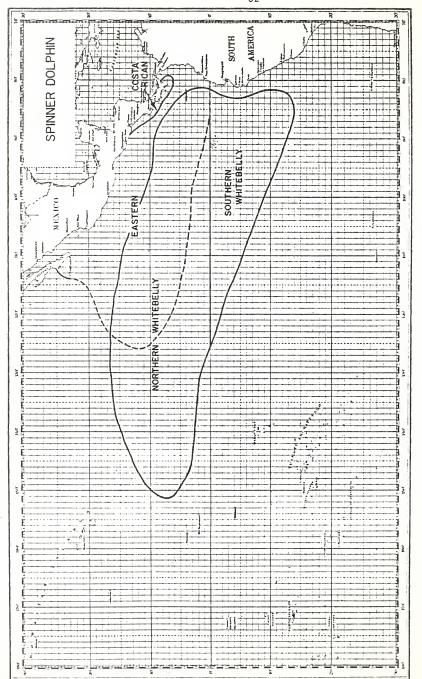
During the mid-1960's, it was found that speedboats could be used to direct the movements of porpoise and associated tuna. Herding of porpoise greatly increased the efficiency of the fishing operation but also had other consequences: (1) porpoise could not be easily released from the nets without risking the loss of tuna; (2) porpoise in the net slowed the

retrieval process; and (3) porpoise trapped in the webbing frequently fell from the net during hauling, causing a safety problem for crew on deck. When this new fishing strategy was widely adopted, levels of porpoise injury and mortality rose significantly.

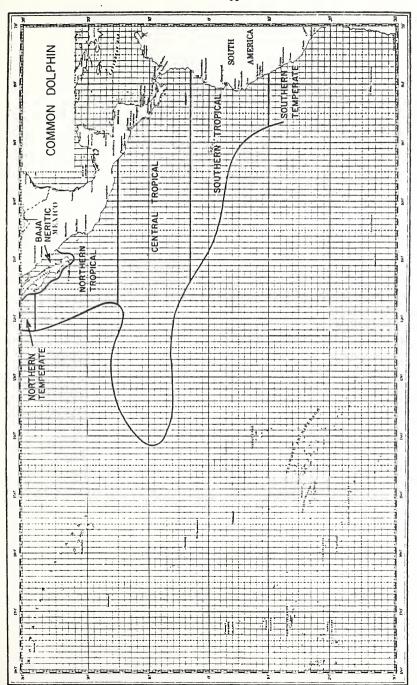
### C. Status of Porpoise Stocks

As indicated in the FEIS for the 1980 rulemaking, 13 species (which include 23 stocks) of porpoise and small whales are known to be involved in the ETP tuna fishery. However, there are three species with 12 stocks which are most directly involved in the fishery (Table 2). Detailed information on these stocks may be found in section 3.2.2 of the 1979 Status of Porpoise Stocks (SOPS) Workshop Report (NMFS, 1979). Note that the term "dolphin" is used when referring to specific species or stocks while "porpoise" is used as a generic term for all species.

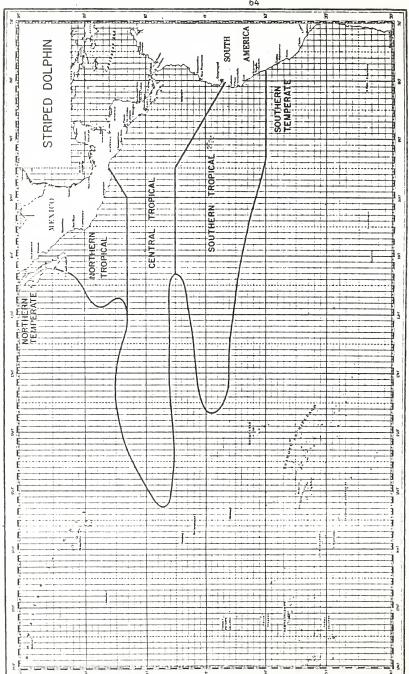
The principal porpoise stocks affected by the fishery occur throughout the Commission's Yellowfin Regulatory Area (CYRA) in the ETP. The NMFS' estimated geographical distribution of these stocks is shown in Figures 2 through 5. These boundaries represent the estimated maximum range over the long term and do not reflect possible seasonal or annual shifts within the



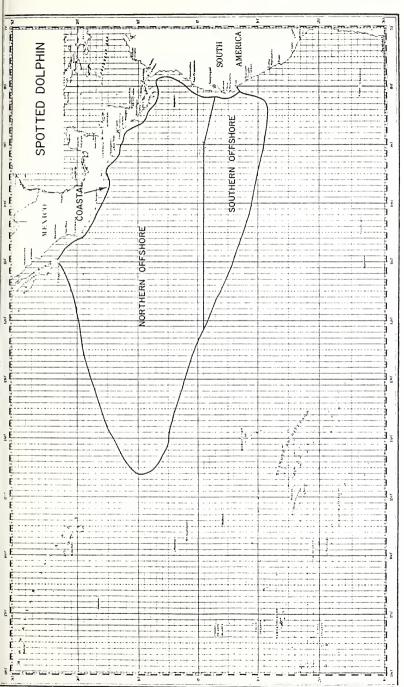
Distribution of the several stocks of spinner dolphin, <u>Stenella longirostris</u>, in the eastern Pacific Ocean. Figure 2.



Distribution of the several stocks of common dolphin, Delphinus delphis, in the eastern Pacific Ocean。 Figure 3.



Distribution of the several stocks of striped dolphin, Stenella coeruleoalba, in the eastern Pacific Ocean. 4. Figure



Distribution of the several stocks of spotted dolphin, Stenella attenuata, in the eastern Pacific Ocean. 5

boundaries. Although sightings are reported from areas outside these stock boundaries, such sightings are considered rare events.

The 1984 MMPA amendments continue indefinitely the quotas set for the 1981-85 period, except that quotas of 2,750 eastern spinner and 250 coastal spotted dolphin are to be included in the cumulative quota of 20,500 dolphin in the General Permit. The "accidental take" provision will no longer apply to eastern spinner or coastal spotted dolphin but will continue for other non-target species of porpoise. All animals taken will be counted against the cumulative quota whether or not there is a quota for the species (49 FR 46908).

As part of the rulemaking process as originally announced, the Southwest Fisheries Center initiated a review of the data used in the 1979 Status of Porpoise Stocks (SOPS) Workshop Report as well as new data available up to 1984; however, preparation of a new SOPS document was superseded by the 1984 MMPA amendments, in which Congress recognized the need to continue protecting porpoise while reducing administrative and legal proceedings.

The NMFS has reviewed the status of stocks pursuant to the ruling in ATA v. Baldrige (738 F. 2d 1013). The 1979 estimates of stock sizes and projections of 1985 conditions for principal populations (northern offshore spotted, coastal spotted, and eastern spinner) have been recalculated in accordance with the

parameters established by the court. The revised estimates are shown in Table 3. The most significant result of this recalculation is that every principal population stock is above its respective optimum sustainable population (OSP) level.

## D. Status of Tuna Stocks

The IATTC monitors stocks of tuna in the ETP. The latest Annual Report (IATTC, 1984b.) summarizes that the yellowfin tuna stock in the ETP is healthy. There has been no IATTC regulatory program (i.e., yellowfin quota) since Mexico and Costa Rica withdrew in 1978 and 1979 respectively. The recommended (but non-binding) IATTC quota for yellowfin in 1984 was 162,000 tons, with a provision to increase the quota if fishery information received during the year supported an increase. This was down from the 1983 quota of 170,000 tons but up from the 160,000 ton initial quota for 1982. It was noted that the 1983 yellowfin catch (90,400 tons) in the IATTC regulatory area was the lowest on record since 1967. The low 1982 and 1983 harvests increased the yellowfin stocks. preliminary estimate of total 1984 yellowfin catch in the ETP is 160,000 tons, and catch rates apparently were significantly higher than in 1982 and 1983, reflecting the improvement in stocks as well as the abatement of El Nino ocean conditions. The recommended initial 1985 yellowfin quota is 174,000 tons.

Table 3. Estimated Current and Future Population Levels.

Species/Stock Management Unit	Estimated 1979 Population	1979 Status	Adjusted 1979 Population <sup>3</sup>	Adjusted 1979 Status	Projected 1990 Status	
Spotted dolphin						
northern offshore	3,150,000	•63	6,115,000	•85	•92	
southern offshore	638,700	.95			.93	
coastal	193,200	•42	414,600	•76	68°	
Spinner dolphin						
eastern	418,700	.27	918,800	.55	.71	
northern whitebelly	486,600	.78			.83	
southern whitebelly	264,900	06*			06°	
Common dolphin						
northern tropical	216,900	.97			<sup>5</sup> 6°	
central tropical	848,400	68°			<b>76°</b>	
southern tropical	477,100	1.00			66°	
Striped dolphin						
northern tropical	20,600	1.00			86.	
central tropical	213,300	66°			1.00	
southern tropical	483,000	1.00			1.00	

1 Proportion of pre-exploited stock size.

estimated 1979 population for all other populations; includes assessment for equal levels of U.S. and non-U.S. porpoise mortality; incorporates actual 1980-84 mortality; assumes 1985-89 mortality will occur in same proportion as 1979-84 2 Projected from adjusted population for northern offshore coastal spotted, and eastern spinner dolphin and from mortality by species.

3 Adjusted in accordance with court directive only for northern offshore spotted, coastal spotted, and eastern spinner due to question about status of population; other populations were and continue to be healthy and no adjustment was necessary. The IATTC has not found any scientific evidence that exploitation has affected skipjack abundance, although catch levels fluctuate considerably from year to year.

#### E. Socioeconomic Conditions

## 1. Global organization of the tuna industry

The tuna processing industry worldwide has expanded in recent years, as new tuna packing plants have been built in Taiwan, Thailand, the Philippines, and other countries. Total worldwide catch of tropical tuna (yellowfin and skipjack) increased to a total of 1.29 million short tons in 1982 (FAO, 1984).

The U.S. remains the largest consumer of canned tuna, the primary product from tuna taken in the ETP.

#### 2. International ETP tuna fleet

The IATTC (1984c) has reported that an international fleet of 213 vessels with an aggregate carrying capacity of 116,412 short tons fished in the ETP all or part of 1984; of the total, 164 vessels were purse seiners. The 1984 fleet capacity was the lowest since 1973 due to vessels leaving the ETP fishery and to vessels becoming inactive. The U.S. purse seine fleet (106 vessels with

47,998 short tons capacity) was the largest component of the IATTC-monitored fleet; Mexico (54 vessels, 43,130 short tons) was the next largest, followed by Ecuador (35 vessels, 6,502 short tons). The rapid increase in the number and capacity of the IATTC-monitored fleet appears to have peaked in the mid-1970's. There was little change from 1976 to 1982, as new construction was offset by vessels leaving the fishery (IATTC, 1984b). In 1982 and 1983, however, the IATTC-monitored fleet declined by about 45,000 tons as a large number of U.S. and non-U.S. purse seiners relocated to the western Pacific, at least for a time. Table 4 indicates total yellowfin catch and the importance of porpoise-associated yellowfin to the international fleet, 1980-1984.

## 3. U.S. purse seine fleet

The NMFS closely monitors and reports quarterly on the activities of the U.S. purse seine fleet to determine shifts in areas of operation, changes in the names of vessels, and transfers from or return to U.S. flag. As of the end of 1984, there were 114 purse seine vessels with an aggregate capacity of 117,000 short tons under U.S. flag. Seventy-five vessels were 1,000 tons or larger, 28 were between 400 and 1,000 tons, and 11 were less than 400 tons. The U.S. fleet declined about 12

Table 4: Total Yellowfin Harvest (All Gears) and Amount and Proportion Taken by Purse Seining on Porpoise in ETP 1980-1984, All Countries (Short Tons)

Year	Total Yellowfin	Yellowfin With Porpoise	% of Total
1980	176,800 <sup>1</sup>	85,200 <sup>3</sup>	48.2
1981	201,700 <sup>1</sup>	92,600 <sup>4</sup>	45.9
1982	138,900 <sup>1</sup>	70,800 <sup>4</sup>	51.0
1983	103,9001	55,000 <sup>5</sup>	52.9
1984	160,000 <sup>2</sup>	(N/A)	(N/A)

<sup>1</sup> IATTC Background Paper #1, 1984.

<sup>&</sup>lt;sup>2</sup> Preliminary IATTC summary, 1985.

<sup>3</sup> Hammond and Tsai, 1982.

<sup>4</sup> IATTC Background Paper #6, 1983.

Derived from data in IATTC Background Paper #6, 1984.

percent in overall capacity in 1984, as 16 vessels with a capacity of 14,954 tons exited the fleet due to 10 flag transfers, three sinkings, and three conversions.

Only one baitboat entered the fleet in 1984.

Most of the smaller vessels are relatively old, have limited range, and do not fish on porpoise. No vessel with a capacity less than 1,200 tons has been built for several years (U.S. Tuna Foundation et al., 1984). The larger vessels are relatively new and highly efficient, with very sophisticated electronic instrumentation and navigational devices. Most new vessels have helicopters to increase their efficiency in finding tuna schools. A new 1,200 ton vessel may cost more than ten million dollars, not including electronics and a helicopter.

Nets, speedboats, and other gear probably add one million dollars in investment for a typical large purse seiner.

Only a portion of the U.S. purse seine fleet operates in the permit area under the ATA General Permit and a certificate of inclusion. The number of certificated vessels has decreased sharply since 1981, when 94 purse seiners held certificates. In 1983, 60 vessels were certificated, and only 34 vessels were certificated in 1984. The decrease reflects the movement of many large seiners to the western Pacific and the fact that other

large seiners have been inactive. Virtually all certificated vessels in the past couple of years have been Class III (larger than 400 tons) seiners. Smaller vessels generally do not set on porpoise and therefore do not obtain certificates of inclusion.

## 4. U.S. fleet catch and revenues

#### a. Harvest

The total amount of tropical tuna caught by U.S. vessels and delivered to U.S. canneries increased from 1982 to 1983, the first year-to-year increase since the 1977-78 period. Table 5 presents a summary of the total amount of yellowfin and skipjack caught by U.S. vessels, and the amounts taken in the ETP, delivered to U.S. canneries during 1980-1984.

# b. Composition of catch

Yellowfin and skipjack tuna are the principal target species of the purse seine fleet. The species composition of the catch destined for canneries varies considerably from year to year. There has been a gradual shift to a higher proportion of skipjack, from 39.8 percent of

total U.S. tropical tuna catch in 1979 to 60 percent in 1984. In the ETP, however, yellowfin has been more than 60 percent of total U.S. purse seine catch delivered to U.S. canneries every year since 1981 (Table 5).

### c. Area of catch

There has been a significant shift in the ocean of origin of U.S.-caught tropical tuna in recent years. In 1980, the eastern Pacific accounted for 216,200 short tons of yellowfin and skipjack, about 92 percent of total U.S. cannery receipts of yellowfin and skipjack. In 1983, the eastern Pacific accounted for 105,900 short tons of yellowfin and skipjack, about 39 percent of the total. The western Pacific, on the other hand, accounted for 13,300 short tons of tropical tuna in 1980, and 169,100 short tons in 1983, when western Pacific catches exceeded eastern Pacific catches for the first time. This was repeated in 1984, as the western Pacific accounted for 169,800 tons and the ETP for 69,600 tons of tuna delivered to U.S. canneries (NMFS, preliminary data).

Table 5: Amounts of Tropical Tuna Caught in the ETP and All Areas by U.S. Vessels and Delivered to U.S. Canneries, 1980-84 (Short Tons)

	ET	ETP		All Areas	
Year	Yellowfin	Skipjack	Yellowfin	Skipjack	
1980	115,600	100,600	119,200	115,200	
1981	109,200	73,800	126,200	97,800	
1982	94,600	59,900	118,700	102,500	
1983	65,800	40,100	120,000	155,000	
1984	48,600	21,000	94,700	145,600	

Source: NMFS, Statistics and Market News, Southwest Region, NMFS.

Does not include landings by U.S.-flag vessels on foreign charters or by U.S. vessels delivering tuna at U.S. or foreign sites destined for foreign canneries or destined for fresh fish markets.

This shift in area of operation by the U.S. fleet may be due to several factors. The Pacific Tuna Development Foundation, funded by NMFS and industry, arranged for exploratory tuna fishing in the western Pacific for several years. This demonstrated that it is economically feasible to purse seine for tuna in that area. U.S. vessels were able to achieve high catch rates in the western Pacific in 1983. Also, catch rates dropped sharply in the eastern Pacific. The warm water conditions associated with El Nino may have resulted in reduced availability or vulnerability of yellowfin and skipjack to the fishery. At the same time, the American Tunaboat Association negotiated two agreements with groups of Pacific island governments to establish access to productive tuna fishing grounds in the western Pacific.

The western and southern Pacific is likely to continue being an important fishing area for U.S. vessels. The U.S. is participating in discussions among the Pacific island nations to try to ensure access to tuna in these waters for U.S. vessels. The ATA agreements indicate the industry's interest in maintaining access to these areas. Meanwhile, cannery capacity in

American Samoa has been increased, and tuna transhipping facilities have been expanded in the Northern Marianas and Guam. This increases the probability that U.S. vessels will remain in the western and south Pacific because they will not have to spend much time and fuel in transit to unload their catch and resupply. Fishing time thus will be maximized.

The ETP, however, also will continue to be an important fishing area, and preliminary 1984 data suggest that some U.S. vessels may return to the ETP from other areas in the next year or two. The catch rate for U.S. vessels went up sharply from the 1983 level and was higher than any year since 1976. Although U.S. purse seine effort was lower, the catch was about the same as in 1983 (Table 6). The change was especially dramatic for sets on porpoise, for which the catch rate increased to 18.6 tons per set capturing porpoise from 10.9 tons per set in 1983 (PRF, unpublished data). Overall, purse seiner trips were being completed in about 60 days compared to more than 90 days in 1982 and 1983, evidence of outstanding catch rates.

Table 6: Relative importance of porpoise-caught yellowfin tuna to U.S. ETP purse seine catch, 1980-1984 (short tons)

Year	U.S. ETP Purse <sup>1</sup> Seine Catch	Yellowfin Caught <sup>2</sup> on Porpoise	Porpoise-Caught as % of Total Purse Seine Catch
1980	213,600	59,500	27.8
1981	183,200	63,100	34.4
1982	154,800	49,800	32.2
1983	105,900	34,200	32.3
1984	105,700	59,200	56.0

 $<sup>^{\</sup>rm l}$  Includes estimated catch of yellowfin and skipjack by U.S. vessels on charter and by U.S. vessels delivering fish for foreign transshipments.

 $<sup>^2</sup>$  Includes yellowfin caught by U.S. vessels on charter to foreign interests while retaining U.S. flag.

The continued importance of the ETP is confirmed by data on the total ETP harvest in 1984. The preliminary estimates of ETP catch by all nations are 160,000 tons of yellowfin and 66,500 tons of skipjack. This contrasts with the estimated 103,900 tons and 64,700 tons respectively in 1983 (IATTC, 1984b). As indicated earlier, the IATTC concluded that the 1985 yellowfin quota (non-binding) could be increased to 174,000 tons, up from the 1984 initial quota of 162,000 tons, due to the healthy condition of the yellowfin stock.

#### d. Revenues

Total revenues from tropical tuna for U.S. tuna vessels increased from 1982 to 1984, even though ex-vessel prices continued to fall. Prices for yellowfin and skipjack tuna had increased rapidly from \$615 per ton for premium yellowfin (over 7 1/2 pounds) and \$575 per ton for premium skipjack (over 5 pounds) in 1977, to \$1,200 per ton and \$1,100 per ton respectively at the start of 1980. Posted prices then fell, and by the end of 1984 were down to \$800-900 per ton and \$763 per ton respectively (not including quality adjustments). It is estimated that total revenue

in 1984 for U.S. vessels from deliveries of tropical tuna to U.S. canneries was \$248 million, up about seven percent from 1983.

## e. Financial condition of the fleet

The American Tunaboat Association (ATA) presented a lengthy and detailed statement on the financial condition of the U.S. fleet for the 1980 rulemaking. Among the important items were that the average mortgage for 76 Class III tuna seiners (larger than 400 tons) with recorded indebtedness was about \$3.7 million. The mortgage for a new 1,200 ton seiner would range from \$6 million to \$7.5 million, not including the cost of skiffs, nets, helicopter, and other equipment. The average term was about 10 years with an interest rate of 13-14 percent. A projection was made that even at the then-high (1980) yellowfin and skipjack prices, a 1,200 ton seiner with a \$3.5 million, 10-year, 14 percent mortgage, would be very hard pressed to make all principal and mortgage payments from the cash flow of its operations, forcing refinancing, new indebtedness, or ceasing operations.

The projection may have seemed extreme at the time but the fleet has been under severe financial stress the past few years. As landings and ex-vessel prices dropped from 1980 through 1982, total revenue to the fleet was substantially reduced. The fact that more than 20 percent of the fleet was tied up for all or part of 1982 through 1984 is evidence of financial weakness. Some tuna processors have sold or attempted to sell their equity interest in tuna vessels, suggesting these firms expect alternate investments to yield higher returns. In the absence of more information on revenues, operating costs, and the tax consequences of different investments and operating strategies by vessel owners, it is not possible to establish the exact financial condition of the fleet or individual vessels. It is clear, however, that a large portion of the U.S. fleet continues to face serious financial difficulty.

# 5. U.S. tuna canning industry

The principal product associated with the ETP purse seine fishery is canned lightmeat tuna derived from yellowfin, skipack, bluefin, and bigeye tuna. Canneries

also use tuna dark meat and tuna-like fish to produce pet food and fish meal, oil and solubles.

The U.S. tuna canning industry has experienced substantial difficulty in recent years, due in large part to very rapid growth in imports of tuna canned in water. From 1979 to 1983, imports of such tuna grew from 53.7 million pounds to 122.3 million pounds. The amount of imported canned tuna increased further in 1984 to 164 million pounds, almost all of which is canned in water. Import penetration as a percent of apparent domestic consumption has more than doubled to about 17-18 percent (USTF, 1984). According to industry spokesmen, imports are specifically directed toward private label and institutional pack customers, which account for 43 percent of consumption and are the fastest growing segments of the market. As a result, several U.S. canning facilities have closed permanently, and others have closed for one to two months at a time. Overall domestic processing capacity declined by 12 percent in 1982, and additional canneries closed in San Diego and Terminal Island (California) in 1983 and 1984. Employment dropped by 4,100 and is now more than 20 percent below the 1979 level. More than 20 percent of the fleet was idle for all or a part of 1983.

Although domestic consumption of tuna has increased in the last several years, all of this increase is attributable to imports.

The United States Tuna Foundation (USTF), the American Tunaboat Association (ATA), the Fishermen's Union of America, and other representatives of the U.S. tuna industry submitted a "Petition for Relief from Imports of Tuna, Prepared or Preserved in any Manner, in Airtight Containers (Canned Tuna) under Section 201 of the Trade Act of 1974" to the International Trade Commission (ITC) on February 15, 1984. The petition argued that increasing imports of canned tuna in water were the substantial cause of serious injury to the domestic industry, and that losses threatened to bring about a significant liquidation of domestic tuna harvesting and processing facilities. It was noted that the basic duty rate on tuna packed in water is 6 percent while the duty on tuna packed in oil is 35 percent. The petition claimed that this disparity was insignificant at a time when imports of tuna not in oil were negligible and were expected to remain at a low level. It was stated that this disparity was inadvertent and that the tariff structure has had serious though unintended adverse implications for the domestic

industry. In July, the ITC declined to recommend tariff relief for the industry, concluding that low cost imports are not the main source of injury.

There were some encouraging signs of a rebound in the industry in 1983. Cannery receipts of domesticallycaught tuna rose to 275,100 tons, up 24 percent from 1982. The amount of imported, unprocessed tuna received by canners dropped by about 25,000 tons (9 percent) from the 1982 level. Consumption of canned light meat tuna rose 12 percent in 1983. Domestic industry production of light meat tuna rose 10 percent from 1982, to a total pack of almost 23.3 million standard cases. Inventories of canned tuna decreased. Production of canned light meat tuna in California decreased three percent (to 9.2 million cases), was unchanged in Puerto Rico (8.6 million cases), and was up 82 percent in American Samoa (to 5.5 million cases). U.S. civilian per capita consumption of canned light meat tuna is estimated to have increased by 11 percent in 1983. The U.S. tuna industry also has introduced a line of low-sodium (lowsalt) canned tuna products which has experienced wideranging acceptance in terms of retail distribution.

### F. International Considerations

Though the IATTC yellowfin management program is no longer in effect, there are other aspects to the international program (see II.A.2.c).

The IATTC scientific staff has continued tuna stock assessment and biological research activities. The IATTC also has been responsible for placement of biological technicians on a sample of foreign and U.S. purse seine vessels to collect data on distribution, abundance, and mortality of porpoise and the effects of purse-seine gear and fishing operations on dolphin kill-per-ton and kill-per-set rates. Mortality data from foreign placements are not representative of the entire foreign fleet because placements have not been made on vessels in all non-U.S. fleets. Also, placement levels have been low. Therefore, a statistically sound estimate of mortality on non-U.S. vessels cannot be made. Nonetheless, IATTC data contribute substantially to the overall study of tuna/porpoise interactions.

Progress has been made in negotiating a new international tuna licensing agreement for the ETP. The U.S., Costa Rica, Panama, Honduras, and Guatemala have signed the San Jose accord for an eastern Pacific Ocean tuna fishing agreement. The U.S. and Panama have ratified the document. It is hoped that this will be the precursor of a broader agreement for the ETP.

In addition, the ATA has entered into two (2) regional licensing agreements with western and southern Pacific entities. The first is with the Government of Kiribati, the Federated States of Micronesia, and Palau. The second is with the governments of New Zealand (in respect of Tokelau), Niue, Tuvalu, Western Samoa, and the Cook Islands. Both agreements entered into force January 1, 1983, and ran through December 31, 1984. The first agreement has been extended, and discussions are continuing on renewal of the second. These agreements and possibly others in the future could assure access to productive fishing grounds in the western and south Pacific for U.S. purse seiners. If these agreements are not extended, vessels now active in that area might return to the ETP.

As noted earlier, importation of ETP tuna and tuna products from nations whose vessels use purse seine gear is conditioned on a finding by the Assistant Administrator that the country's purse seine fishing is controlled so the fishery does not result in rates of mortality or serious injury substantially different from U.S. vessel rates. The 1984 MMPA amendments strengthen this requirement, and specific steps are being taken to define and obtain appropriate documentation.

In summary, the U.S. tuna industry continues to be under economic pressure. Processing plants in California have closed, employment is down, a large portion of the fleet is inactive, and low-cost imports have taken a large share of the market for canned tuna. U.S. vessels increased their harvest of tuna in 1983 and 1984, but ex-vessel prices dropped, and total ex-vessel revenues have increased only moderately. The western Pacific accounted for 60 percent of total U.S. tuna harvest in 1983 and 1984, outproducing the ETP, even though ETP catch rates increased sharply in 1984. U.S. vessels probably will return to the ETP in larger numbers in coming years but the timing cannot be predicted with certainty.

## V. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND ALTERNATIVES

#### A. Framework for Analysis

The U.S. tuna fleet and processing industry are affected by a variety of conditions and factors beyond the control of NMFS. The regulations governing purse seining for tuna associated with porpoise were among the more critical factors when they first were instituted in the 1970s. The ETP then was the primary fishing area, and porpoise-associated yellowfin were a primary target stock for the fleet. Little fishing was done in the western and south Pacific; industry and NMFS-sponsored exploratory fishing had not yet demonstrated the economic

feasibility of purse seining in those waters. The new tuma/porpoise regulations required very substantial investments in new gear and new fishing practices as well as generating high legal and administrative costs to participate fully in the rulemaking process.

The industry has now made the necessary adjustments to reduce porpoise mortality and serious injury. Porpoise mortality since 1975 has been greatly reduced in absolute terms as well as in terms of mortality/set and mortality/ton of tuna. Vessel operators and crew are familiar with the gear and techniques involved. Most of the procedures (e.g., backdown) are well established practices which could be expected to continue even without the tuna/porpoise regulations.

Meanwhile, the world tuna industry has changed dramatically in the last few years. Import competition has had severe effects on domestic processors, who are losing market share. Processors have closed canneries, laid off employees, and reduced the prices paid to U.S. vessels for tuna. A large portion of the U.S. purse seine fleet has been forced to remain inactive. Domestic vessels increased their harvest in 1983 and 1984, but landings were well below the peak reached in 1976, and 1983 was the first year with increased landings since 1978. The size of the U.S. fleet also has decreased. In short, the U.S. tuna industry is facing strong financial presssure. The significance of the tuna/porpoise regulations

is relatively lower than in the previous rulemaking in 1980, and the effects of changes in tuna/porpoise regulations are not likely to be as pronounced as in 1980. Nonetheless, the regulations are very important to the U.S. fleet given the overall financial difficulties with which it is faced and the increased importance of porpoise—associated yellowfin to the U.S. vessels in the ETP.

In addition, the scope of the rulemaking is substantially narrower than in 1980. The 1984 MMPA amendments extend indefinitely the quotas established in the 1980 rulemaking, and added quotas for eastern spinner and coastal spotted dolphin. The amendments continue the current ATA General Permit. Also, the Secretary is directed to carry out a program to monitor trends in abundance and population status of porpoise stocks and take corrective action if the level of taking is adversely affecting a stock or stocks. The amendments allow the Secretary to "make such adjustments as may be appropriate to those terms and conditions that pertain to fishing gear and fishing practice requirements and to permit administration." The amendments state further that "any such term or condition may be amended or terminated if the amendment or termination is based on the best scientific information available including that obtained under the monitoring program . . . ", the latter referring to the new research mandate described above.

The NMFS believes the proposed changes to the procedural and gear requirement regulations are consistent with the intent of Congress. The NMFS estimates that these regulations will not have a significant effect on overall mortality rates (kill/ton, kill/set) or on vessel operations by affecting the ability to use porpoise-saving gear and techniques effectively.

The current regulatory program is described in Section IV.A.2 of this document. The fleet has operated well within the quotas set in the 1980 rulemaking, 1982 excepted. The rate of porpoise kill/set declined from 70 in 1971, to 16 in 1975 (NMFS, 1979), to 5.1 in 1984; the rate of kill/ton of yellowfin fell from 3.8 in 1971, to 1.3 in 1975, to .28 in 1984. Except for 1982, the rates of kill/set and kill/ton have been relatively stable in the current regulatory cycle. Since 1971, kill/set is down by 95 percent, and kill/ton is down 92 percent.

The accuracy of estimates of total porpoise mortality, mortality by species, and mortality rates for non-U.S. fleets on an annual basis is not known. The IATTC places observers on a limited number of foreign purse seiners to estimate porpoise mortality. The IATTC estimated that total mortality for non-U.S. fleets for 1979-1983 was approximately 14,000 animals per year (IATTC, 1984a). These estimates, while imprecise, suggest

that foreign purse seiners can and do limit porpoise mortality by using gear and techniques developed for and by the U.S. fleet.

It is impossible to predict with certainty the extent to which U.S. purse seine vessels will fish in the ETP whether or not the current tuna/porpoise procedural, gear, and administrative regulations are changed. Other factors — catch rates, access agreements, exvessel prices for tuna in different areas — are likely to be more important than the proposed regulations in determining when and where to fish. Nonetheless, a review of past conditions can be useful to consider possible future conditions without regulatory amendments. A summary of pertinent data is presented in Table 7.

Current evidence reveals that some vessels in the U.S. purse seine fleet have returned to the ETP, and with the high catch rates of 1984, effort in the ETP is likely to increase from the low level of 1983 and 1984. The estimated U.S. catch of tropical tuna in the ETP in 1984 was about the same as in 1983. The relative importance of yellowfin associated with porpoise increased substantially in 1984.

For the purpose of providing a baseline to estimate the effects of alternative actions, it seems reasonable to estimate that the average of results in the 1981-1984 period will occur if

Table 7: Summary Statistics for U.S. 1 Tuna/Porpoise Fishery, 1981-1984

Sets > 15 Mort.	5.4	7.3	3.5	5.8	5.7
Percent of Sets  O Mortality > 15	7.09	56.1	61.8	64.7	60.4
Mortality Per Ton	.31	.47	.25	•28	•32
Yellowfin Catch on Porpoise (tons)	63,100	49,800	34,200	59,200	51,600
Mortality Per Set	3.2	3.2	5.1	3.0	4.1
Porpoise Mortality	17,890	23,267	8,513	17,732	16,813
Porpoise Sets	5,635	4,528	2,853	3,477	4,123
Total Cert, Porpoise Trips Sets	230	183	104	. 93	152
Observed Trips	91	70	30	27	54
Year	1981	1982	1983	1984	1981-84 Average

<sup>&</sup>lt;sup>1</sup> Includes catch and porpoise mortality by U.S. flag vessels on charter to foreign interests.

the current regulations are not amended. Under these conditions, the following would occur for the U.S. fleet the next few years.

ETP Purse Seine Catch 137,400 tons

Porpoise-Caught Tuna 51,600 tons

Cumulative Porpoise Mortality 16,800 animals

(quota sp., including eastern

spinner and coastal spotted)

Mortality Per Set 4.1 animals

Mortality Per Ton .32

## B. Impacts of the Proposed Action and Alternatives

As indicated earlier, Congress has extended the General Permit and quotas indefinitely. Therefore, the question being addressed is whether the proposed regulatory changes will have impacts on the environment given that the Permit and quotas are fixed. It is not possible to estimate the isolated effects of every specific regulatory change proposed; therefore, the effects of alternative strategies (proposed changes, no action, more stringent, less stringent) are evaluated and compared.

# 1. Biological impacts

The proposed regulations are not expected to have a significant impact on total porpoise mortality, on

mortality of specific species, or on mortality rates per set and per ton of tuna. If the amendments lead to more porpoise fishing in the ETP with no change in mortality rates, or if mortality rates increase due to less caution by U.S. vessel operators, total porpoise mortality would be higher than if the regulations were not amended. Mortality is not expected to reach, and will not be permitted to exceed, the quotas set by Congress. All population stocks will remain within their OSP ranges.

The proposed regulations are not expected to affect the total harvest of yellowfin or skipjack tuna in the ETP, hence, will not affect the stocks of these tuna.

There is some risk that porpoise mortality will approach the quotas established by the 1984 MMPA amendments if the regulatory regime is changed. This risk is due to skippers or crew exercising less caution in carrying out rescue procedures because of the flexibility afforded by the proposed regulations. There is also a possibility that more fishermen might return to fish in the ETP if led to believe that controls were lessened.

There are three reasons why significant increases in mortality are not anticipated with the proposed regime:

- (1) The requirement for backdown will be maintained and every vessel must use a super apron or fine mesh system. These are the principal porpoise saving elements in the regulatory regime.
- (2) Vessel operators know it will be in their best interest to carry out porpoise saving measures effectively. They do not want the ETP fishery closed during the year, which could happen if the quota were reached. They also will be under significant peer pressure. Skippers whose vessels have sets with high mortality rates would expect to be asked to meet with their peers on the Expert Skippers Panel to discuss the problems with their fishing practices.
- (3) The NMFS guidelines will be based on actual experience and will provide practical advice on how to prevent and respond to problems. This information is expected to be more useful than the regulations to prevent mortality.

The "no action" alternative would maintain the <u>status</u>
quo. Tuna catch, porpoise mortality, and mortality per set and per ton estimates are set forth in the "baseline" conditions. As noted earlier, there is considerable uncertainty regarding the level of future

porpoise-associated fishing effort in the ETP, which in turn leads to uncertainty in estimating tuna catch and porpoise mortality levels. The NMFS believes that porpoise mortality will not be significantly different under the "no action" alternative than under the proposed action. All population stocks would remain within OSP ranges. Overall U.S. tuna catch in the ETP would be about the same, and there probably would not be any effect on the status of tuna stocks.

The "more stringent" alternative would likely result in lower porpoise mortality than the proposed alternative. Total U.S. fishing effort in the ETP probably would be lower because of inefficiencies imposed by more stringent regulations. Vessel operators therefore would be more likely to fish elsewhere. The "more stringent" alternative could include the prohibition of sundown sets, effectively reducing porpoise-associated fishing time by about 12 percent and thus reducing total porpoise sets. All porpoise population stocks would remain within OSP ranges.

Under this alternative, it also is likely that total
U.S. tuna harvest in the ETP would be lower than under
the proposed alternative. This could result in a small
increase in stock size of yellowfin tuna, but the degree
or amount of increase cannot be estimated. However,

there could be more effort on non-porpoise yellowfin schools, which typically contain smaller fish. This could adversely affect future catch levels.

Under the "less stringent" regulatory alternative, there would be a higher probability that the porpoise mortality quota would be reached during a calendar year. The quota would be virtually the only control on porpoise-associated tuna fishing. It seems reasonable to estimate that there would be more porpoise-associated effort in the ETP, at least early in the year, and that mortality per set or per ton of tuna would be slightly higher than under the proposed action. However, total mortality would not be permitted to exceed the mortality quota set by Congress, and all population stocks would remain at OSP levels. Under this alternative, it is unclear if tuna catch in the ETP would differ from catch under the proposed alternative. On the one hand, there might be increased porpoise-associated effort and catch early in the year. However, if porpoise mortality per ton of tuna is high, then the quota would be reached during the year, and the porpoise-related fishery would be closed. Effort could be directed to non-porpoise schools of yellowfin and to skipjack, but catch per set is lower for these species. Also, smaller-sized yellowfin are taken in non-porpoise sets. Total tuna catch could be less than if the fishery is open all year with low mortality rates. However, the status of tuna stocks is not likely to be affected significantly.

#### 2. Economic impacts

The proposed changes will be beneficial to the U.S. tuna industry. The regulatory burden on the U.S. tuna fleet will be reduced. Vessel operators will have greater flexibility to use porpoise saving gear and techniques effectively and efficiently. A small amount of time will be saved by deleting the marine mammal log requirements.

It is expected that U.S. vessels in the ETP will harvest about the same amount of tuna as if no regulatory changes are made. The reduced procedural requirements may result in a higher average tuna catch per day fishing due to a reduction in combined transit time and search time. If so, fuel use and costs will decrease, and vessel revenues will increase.

The proposed regulatory amendments will have little if any effect on industry investment costs. Every vessel will be required to have a super apron system or a fine mesh system. A vessel with a fine mesh system will not have to invest in a super apron. Also, with the amendments, vessel operators will be able to choose

between viewing boxes and mask and snorkel combinations, or between rubber rafts and non-rubber rafts. Most vessels already are suitably equipped. New entrants will have the freedom to consider cost differentials in deciding which type of gear to purchase. The cost differential is probably negligible.

The proposed amendments are not likely to have a significant effect on U.S. tuna processing firms.

The "no action" alternative would be more costly for the U.S. fleet than the proposed action. The current procedural requirements impose some inefficiencies on U.S. vessels. However, U.S. tuna vessels' catch in the ETP is not likely to change significantly. Catch per day in the ETP could be slightly lower, resulting in higher cost per ton of tuna caught in the ETP. There could be an increase in search time and transit time to and from fishing grounds, which would increase fuel use and cost.

The "no action" alternative would not have a significant effect on U.S. tuna processors.

The "more stringent" alternative would impose additional inefficiencies on U.S. vessels and would make ETP fishing less economical. There would likely be less

porpoise-associated effort in the ETP. Vessels remaining in the ETP would be adversely affected because prohibiting sundown sets would effectively remove 1.5 hours of fishing time per day, resulting in lower catches and/or adding to the number of days at sea required to complete a trip. Profits would be expected to be lower for vessels in the ETP than under the proposed amendments.

The "less stringent" alternative would benefit U.S. fishermen in the ETP more than the proposed action, at least in the short term. That is, U.S. vessel operators would have greater freedom to catch tuna associated with porpoise until the porpoise quota is reached. Under this approach, however, the quota might be met, and the ETP closed to additional U.S. purse-seining effort on porpoise, before the end of the calendar year. Subsequent purse seining would have to target on school fish in the ETP or elsewhere. Catch rates are generally lower in such sets, and smaller yellowfin and skipjack are taken, which bring lower ex-vessel prices. Thus, while there could be a part-year benefit for the fleet, adverse conditions might follow later in the year. It is unknown if fishing cost per ton and revenues would change. Smaller vessels with limited flexibility to fish beyond the ETP probably would be more adversely affected than larger vessels. Certificated vessels

which are dependent on the ETP would be especially badly affected if the porpoise-associated fishery were closed.

U.S. processors would not be affected significantly under the "less stringent" alternative.

## Administration and enforcement

One of the most important benefits of the proposed regulatory amendments is that they will place the emphasis on results rather than procedures and will improve significantly the likelihood of cooperation between NMFS and industry.

Under the current regulatory regime, large amounts of time and effort are spent reviewing detailed observers records. NMFS observers are viewed as "cops" on tuna vessels, and their presence is resented. Emphasis often is placed on procedural requirements to the exclusion of more serious problems, the solution of which would be more effective in saving porpoise.

In NMFS' view, the regulatory amendments will restore
the primary emphasis on reducing porpoise mortality, and
the program's effectiveness will be measured by
industry's performance toward this goal. The
regulations will no longer tell the industry how to do

its job, but only what to achieve. Critical elements such as backdown and fine mesh net or super apron systems will be retained, but vessel operators will have more freedom to innovate and apply their gear most effectively.

The changes in these gear and procedural regulations will have little impact on NMFS' program costs. The observer program will continue to monitor porpoiseassociated fishing. Placements through the NMFS and IATTC will attempt to cover 30-40 percent of all trips, whether or not the changes in the gear and procedural regulations are adopted. The elimination of some procedural regulations to be replaced by guidelines is not expected to affect enforcement or enforceability. Less time will be needed for NOAA and industry to review observer records to determine if gear or procedural violations occurred and, if so, whether they were serious or inconsequential. The guidelines will provide better information to vessel operators and crew concerning actions which have been effective and ineffective for other skippers to protect and rescue porpoise. The biggest change is likely to be better cooperation by vessel operators and crew in carrying out porpoise rescue practices and in dealing with observers.

The "No Action" alternative could be more difficult and costly to administer than the proposed action. There would be a larger number of specific regulations to enforce, and more time would be needed by NOAA and industry representatives to review observer records to identify specific gear and procedural violations for possible prosecution. This is a very time consuming activity because there are so many variables which must be considered in deciding whether to prosecute and the appropriate penalty for specific violations. In addition, many cases then would work through an extended and costly hearing process, even if relatively low levels of mortality are involved.

The "more stringent" alternative could be more costly to administer and enforce. The NMFS could have to ask for increased funding for observer coverage, although the likelihood of increases is very low. If more detailed regulations were adopted, even more time would be spent reviewing detailed observer records to determine the need and basis for prosecution of violators. Resentment and mistrust of observers would be worse than at present. If some vessels were to leave the ETP and if NMFS' observer placements decrease correspondingly, the usefulness of biological data collected by observers would decrease substantially.

The "less stringent" alternative would reduce further
the number of specific areas for enforcement. If there
were a shift of effort to the ETP, the NMFS could find
it difficult to meet its target for observer coverage,
but a large shift would not be expected.

#### VI. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

The proposed action is not expected to have substantial, unavoidable adverse environmental impacts. No significant change in porpoise mortality is expected and mortality will not exceed the quotas set by Congress. Tuna vessels will continue to be required to use the best economically and technologically feasible gear and techniques for porpoise safety, but the elimination of some detailed procedures will permit greater flexibility to use the techniques and gear most effectively under different circumstances. There could be minor improvements in efficiency of purse seiners with these changes. The amount of change (if any) in purse seining effort, porpoise mortality, and tuna catch associated with the overall marine mammal safety program (including provisions set by the 1984 MMPA amendments) cannot be predicted. Changes associated with these regulations will be minimal in relation to the effects of the overall program.

# VII. RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The overall marine mammal program, including provisions mandated by Congress, is intended to maintain and restore marine mammal populations. It is Congress' finding that the long-term productivity of porpoise under the MMPA will be achieved and protected by continuation of the ATA General Permit and quotas. The proposed amendments to gear and procedural regulations will complement the General Permit and quota elements and contribute to achieving long-term productivity of ETP resources. The program will maintain porpoise population stocks within their OSP ranges while allowing the U.S. tuna fleet to harvest yellowfin associated with porpoise efficiently.

## VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed action is not expected to result in any irreversible or irretrievable commitment of resources. If the results substantially differ from the expected results, the proposed regulations can be modified accordingly.

#### IX. DETERMINATIONS

## A. Marine Mammal Protection Act

The MMPA as amended requires a number of findings in the development of regulatory programs. Notwithstanding that Congress has established upper limits on cumulative and species mortality, it is necessary that the MMPA determinations be made. Specifically:

1. The incidental mortality permissible under the MMPA as amended and likely under the proposed regulatory changes will not be to the disadvantage of the affected species/stocks. Estimates of 1979 and projected 1990 populations are shown on Table 3. These estimates have been derived from the 1979 estimates adjusted (a) to account for actual mortality by species/stock in the 1979-84 period (including estimated non-U.S. mortality); and (b) to respond to the court directive in ATA v. Baldrige, which found that NMFS had erred in its estimation of porpoise population sizes. The 1979 estimates for northern offshore spotted, coastal spotted, and eastern spinner dolphin were adjusted because of the concern that these populations might be below OSP levels. After these adjustments, it is concluded that each species/stock is within its OSP range (i.e., the current size of the population is more than

60 percent of the estimated pre-exploitation population size for every species/stock). The projection of status in 1990 assumes total mortality from U.S. fishing will equal the 20,500 animals per year quota; that mortality from non-U.S. vessels will equal the level from U.S. fishing; and that mortality by species/stock will occur in the same proportion in 1985-89 as in 1979-84. Under these assumptions, all species/stocks would remain in their OSP ranges. Therefore, the incidental taking will not be to the disadvantage of any species/stock.

2. According to the 1984 MMPA amendments, the MMPA goal to reduce the incidental kill and incidental serious injury of marine mammals to insignificant levels approaching zero will be met by continuation of the application of the best marine mammal safety techniques that are economically and technologically practicable. The amendments extend the terms and conditions of the ATA General Permit, but allow the Secretary to make adjustments in requirements for gear, fishing practices and permit administration. The changes proposed will give greater flexibility in the most effective use of marine mammal safety techniques while requiring techniques that are economically and technologically feasible. Therefore, this MMPA goal is determined to be met.

### B. Executive Order 12291

The proposed amendments to the gear and procedural regulations are being promulgated on the record under the Administrative Procedures Act (5 U.S.C. 553(c)), with an opportunity for a hearing if requested. The Department of Commerce General Counsel has concluded that such rulemaking is not subject to the requirements of Executive Order 12291. Nonetheless, this document provides the information which would be required under that Order. The proposed amendments would not be major under the Order. The overall effect of the amendments will be a reduction of the regulatory burden.

## C. Regulatory Flexibility Act

The General Counsel of the Department of Commerce has certified to the Small Business Administration that this proposed action, if adopted, will not have a significant effect on a substantial number of small entities. The U.S. tuna purse seine fleet consisted of 114 vessels at the end of 1984. Only a small portion of this fleet would be directly affected by these regulations. These are vessels (including vessels under U.S. flag on charter to foreign interests) which are operating under the ATA General Permit and certificates of inclusion. Only 34 vessels were certificated in 1984, most of which are larger than 400 tons. These vessels are expected to be affected

similarly, with no variation due to size. Therefore, no variation in regulations is necessary to accommodate differently sized business.

### D. Paperwork Reduction Act

An existing paperwork requirement will be deleted and reserved. The proposed rules will not impose any new paperwork burden on any affected sector of the industry. Therefore, the purposes of the Paperwork Reduction Act are met.

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# § 216.24 Taking and related acts incidental to commercial fishing operations.

(a) (1) No marine mammals may be taken in the course of a commercial fishing operation unless: The taking constitutes an incidential catch as defined in § 216.3, a general permit and certificate(s) of inclusion have been obtained in accordance with these regulations and such taking is not in violation of such permit, certificate(s), and regulations.

(2) A vessel engaged in commercial fishing operation involving the utilization of purse seines to capture yellowfin tuna and which does not operate under a general permit and certificates of inclusion shall not carry more than two speedbosts.

(b) General Permits.—(1) General permits to allow the taking of marine mammals, except those for which taking is prohibited under the Endangered Species Act of 1973, in connection with commercial fishing operations will be issued to persons using fishing gear in any one of the following categories-

(i) Category 1: Towed Or Dragged Gear. Commercial fishing operations utilizing towed or dragged gear such as bottom otter trawls, bottom pair trawls, multi-rig trawls, and dredging gear.

(ii) Category 2: Encircling Gear.
Pursue Seining Involving the Intentional
Taking of Marine Mammals.
Commercial fishing operations utilizing
purse seines to capture tuna by
international encircling marine
mammals. Only vessels that meet the
fishing gear and equipment requirements
contained in § 216.24(d)[2](iv) of these
regulations may be included in this
category.

(iii) Category 3: Encircling Gear. Pursue Seining not Involving the International Taking of Marine Mammals. Commercial fishing operations utilizing pursue seining, which do not intentionally encircle marine mammals.

(iv) Category 4: Stationary Gear.
Commercial fishing operations utilizing stationary gear such as traps, pots, weirs, and pound nets: and

(v) Category 5: Other Gear. Commercial fishing operations utilizing trolling, gill nets, hooks and line gear. and any gear not classified under paragraph (b)(1)(i), (b)(1)(ii), (b)(1)(iii), or (b)(1)(iv) of this section.

(2) Permits shall be issued as general permits to a class of fishermen using one of the general categories of gear set out above. Any member of such class may apply for a general permit on behalf of any members of the class. Subsequent to the granting of general permit, vessel owners, managing owners, or operators (as required) may make application to be included under the terms of a general permit by obtaining a certificate of inclusion. Applications for a general, permit shall contain:

(i) Name, address, and telephone number of the applicant. If the applicant is an organization or corporate entity, a copy of the corporate or organizational charter which sets forth the basis for application on behalf of a group of class of commercial fishermen must be

included;
(ii) A description of permit for which

application is being made:
(iii) A description of the fishing
operations by which marine mammals
are taken: and a statement explaining
why the applicant cannot avoid taking
marine mammals incidentally to
commercial fishing operations;

(iv) The date when the general permit is requested to become effective:

(v) A list of the fish sought by persons requesting certificates under the general permit and the general areas of operations of their vessels.

(vi) A statement identifying the marine mammals and numbers of marine mammals which are expected to be taken under the general permit:

(vii) A statement by the applicant demonstrating that the requested taking of marine mammal species or stocks during commercial fishing operations is consistent with the purposes of the act, and the applicable regulations established under Sec. 103 of the act.

(viii) A description of the procedures and techniques that will be utilized in order that takings under the permit will be consistent with the purposes and policies of the act and these regulations; and

(ix) A certification, signed by the applicant, in the following language: I certify that the foregoing information is complete, true, and correct to the best of my knowledge and belief. I understand that this information is submitted for the purpose of obtaining a general permit under the Marine Mammal Protection Act of 1972 and regulations promulgated thereunder, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or the penalties provided under the Marine Mammal Protection Act of 1972.

(3) The original and four copies of the application for general permit shall be submitted to the Assistant Administrator for Fisheries (hereinafter, the Assistant Administrator), National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce, Washington, D.C. 20235. Applications should be received not less than 180 days prior to the date upon which the permit is to become effective. Assistance may be obtained by writing the Assistant Administrator or by calling the Office of Marine Mammals and Endangered Species, telephone

(4) A general permit shall be valid for the time period indicated on the face of the permit. General permits shall be subject to modification, suspension or revocation and may contain terms and conditions prescribed in accordance with Sec. 104(b) [2] of the act, 18 U.S.C.

1374(b) (2).

number 202-634-7461.

(5) The Assistant Administrator shall determine the adequacy and completeness of an application, and if found to be adequate and complete will promptly publish a notice of receipt of such application in the Federal Register. Interested parties will have thirty days from the date of publication in which to submit written comments with respect to the granting of such permit.

(6) If within thirty days after the date of publication of the Federal Register notice concerning receipt of an application for a general permit, any interested party or parties request a hearing on the application, the Assistant Administrator may within sixty days following the date of publication of the Federal Register notice afford such party or parties an opportunity for such a hearing. Any hearing held in connection with an application for a general permit shall be conducted in the same manner as hearings convened in connection with a scientific research or a public display permit application under Sec. 216.33.

(7) There is no fee for filing an application for a general permit.

(c) Certificates of inclusion.—(1) Vessel Certificates of Inclusion. The owner or managing owner of a vessel that participates in commercial fishing operations for which a general permit is required under this subpart shall be the holder of a valid vessel certificate of inclusion under that general permit. Such certificates shall not be transferable and shall be renewed annually. Provided five (5) days advance written notice is given, a vessel certificate holder may surrender his certificate to the Regional Office from which the certificate was issued. However, once surrendered the

certificate shall not be returned nor shall a new certificate be issued before the end of the calendar year. This provision shall not apply when a change of vessel ownership occurs.

(2) Operator's Certificate of Inclusion. The person in charge of and actually conducting fishing operations (hereinafter referred to as the operator) on any vessel engaged in commercial fishing operations for which a Category 2 general permit is required under this subpart, shall be the holder of a valid operator's certificate of inclusion. These certificates are not transferable and will be valid only on any purse seine vessel having a valid vessel certificate of inclusion for Category 2. In order to receive a certificate of inclusion, the operator shall have satisfactorily completed required training. An operator's certificate of inclusion shall be renewed annually.

(3) A vessel certificate issued pursuant to paragraph (c)(1) of this section shall be aboard the vessel while it is engaged in fishing operations and the operator's certificate issued pursuant to paragraph (c)(2) of this section shall be in the possession of the operator to whom it was issued. Certificates shall be shown upon request to an enforcement agent or other designated agent of the National Marine Fisheries Service. However, vessels and operators at sea on a fishing trip on the expiration date of their certificate of inclusion, to whom or to which a certificate of inclusion for the next year has been issued, may take marine mammals under the terms of the new certificate.

The vessel owners or operators are obligated to obtain physically or to place the new certificate aboard, as appropriate, when the vessel next returns to port.

(4) Application(s) for certificates of inclusion under paragraph (c)(1) of this section should be addressed as follows:

(i) Category 1, 3, 4, and 5 applications: (A) Owners or managing owners of vessels registered in Colorado, Idaho, Montana, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming, should make application to the Regional Director, Northwest Region, National Marine Fisheries Service, 1700 Westlake Avenue, Seattle, Washington 98102.

(B) Owners or managing owners of vessels registered in Arizona, California, Hawaii. Nevada, and the territories of American Samoa, Guem, and the Trust Territory of the Pacific Islands should make application to the Regional Director, Southwest Region, National Marine Fisheries Service, 300 South

Ferry Street, Terminal Island, California 90731.

(C) Owners or managing owners of vessels registered in Alaska should make application to the Regional Director, Alaska Region, National Marine Fisheries Service, P.O. Box 1668, Juneau, Alaska 99802.

(D) Owners or managing owners of vessels registered in Connecticut, Delaware, District of Columbia, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and Wisconsin should make application to the Regional Director, Northeast Region, National Marine Fisheries Service, 14 Elm Street, Federal Building, Gloucester, Massachusetts 01930.

(E) Owners or managing owners of vessels registered in Alabama, Arkansas, Florida, Georgia, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, and Virgin Islands, should make application to the Regional Director, National Marine Fisheries Service, Southeast Region, 9450 Gandy Boulevard North, Duval Building, St. Petersburg, Florida 33702.

(ii) Category 2 applications: Owners or managing owners of purse seine vessels in this category shall make application to the field office, Southwest Region, National Marine Fisheries Service, 1140 North Harbor Drive, Room 7, San Diego, California 92101.

(5) Applications for vessel certificates of inclusion under paragraph (c)(1) of this section shall contain:

(i) The name of the vessel which is to appear on the certificate(s) of inclusion; (ii) The category of the general permit under which the applicant wishes to be

included:
(iii) The species of fish sought and

general area of operations;

(iv) The identity of State and local commercial fishing licenses, if applicable, under which vessel operations are conducted, and dates of expiration:

(v) The name of the operator and date of training, if applicable; and

(vi) The name and signature of the applicant, whether owner or managing owner, address, and if applicable, the organization acting on behalf of the yessel.

(6) Fees. (i) Applications for certificates of inclusion under paragraph (c)(1) of this section shall contain a payment for each vessel named in the application in accordance with the following schedule:

(A) Categories 1: Towed Or Dragged Gear: 3: Encircling Gear, Purse Seining not Involving the Intentional Taking of Marine Mammals: 4: Stationary Gear: and 5: Other Gear—\$10.00.

(B) Category 2: Encircling Gear, Purse Seining Involving the Intentional Taking of Marine Mammals—\$200.00.

(ii) Except as provided herein, vessel owners or managing owners desiring a vessel certificate of inclusion under more than one category of the general permit will not be required to pay a full fee for each certificate. After the initial fee for a certificate is paid for each vessel, additional certificates will be issued for a fee of \$.50 (fifty cents) each. However, every application for a vessel certificate under Category 2 shall contain the full fee.

(iii) Notwithstanding the provisions of subparagraph (c)(6)(i) of this section, an applicant whose income is below Federal poverty guidelines may, upon showing in his application that his income is below such guidelines, be issued a certificate under the following schedule of fee payment:

(A) Categories 1: Towed Or Dragged Gear, 3: Encircling Gear, Purse Seining not Involving the Intentional Taking of Marine Mammals; 4: Stationary Gear, and 5: Other Gear—\$1.00.

(B) Category 2: Encircling Gear, Purse Seining Involving the Intentional Taking of Marine Mammals—\$20.00.

(iv) A fee is not required for an operator's certificate of inclusion.

(v) The Assistant Administrator may change the amount of these required fees at any time he determines a different payment to be reasonable, and said change shall be accomplished by publication in the Federal Register of the new fee schedule.

(7) The Regional Office receiving applications for certificates-of inclusion from vessel owners, managing owners, or operators shall determine the adequacy and completeness of such applications, and upon its determination that such applications are adequate and complete, it shall approve such applications and issue the certificate(s).

(d) Terms and conditions of certificates under general permits shall include, but are not limited to the following:

(1) Towed or dragged gear.—(i) A certificate holder may take marine mammals so long as such taking is an incidental occurrence in the course of normal commercial fishing operations. Marine mammals taken incidental to commercial fishing operations shall be immediately returned to the environment where captured without further injury.

(ii) A certificate holder may take such steps as are necessary to protect his catch, gear, or person from depredation, damage, or personal injury without inflicting death or injury to any marine mammal.

(iii) Only after all means permitted by paragraph (d)(1)(ii) of this section have been taken to deter a marine mammal from depredating the catch, damaging the gear, or causing personal injury, may the certificate holder injure or kill the animal causing the depredation or immediate personal injury; however, in no event shall a certificate holder kill or injure an Atlantic bottlenosed dolphin, Tursiops truncatus, under the provisions of this paragraph. A certificate holder shall not injure or kill any animal permitted to be killed or injured under this paragraph unless the infliction of such damage is substantial and immediate and is actually being caused at the time such steps are taken. In all cases, the burden is on the certificate holder to fully report and demonstrate that the animal was causing substantial and immediate damage or about to cause personal injury and that all possible steps to protect against such damage or injury as permitted by paragraph (d)(1)(ii) of this section were taken and that such attempts failed.

(iv) Marine mammals taken in the course of commercial fishing operations shall be subject to the provisions of Section 216.3 with respect to "Incidental catch," and may not be retained except where a specific permit has been obtained authorizing the retention.

(v) All certificate holders shall maintain logs of incidental take of marine mammals in such form as prescribed by the Assistant Administrator. All deaths or injuries to marine mammals occurring in the course of commercial fishing operations under the conditions of a general permit shall be immediately recorded in the log and reported in writing to the Regional Director to whom the certificate application was made, or to an enforcement agent or other designated agent of the National Marine Fisheries Service, at the earliest opportunity, but no later than five days after such occurrence, except that if a vessel at sea returns to port later than five days after such occurrence then it shall be reported within 48 hours after arrival in any port. Reports must include:

(A) The location, time, and date of the death or injury;

(B) The identity and number of marine mammals killed or injured; and

(C) A description of the circumstances which led up to and caused the death or injury.

(vi) Failure to comply with provisions of the general permit or certificate of inclusion including, but not limited to, failure to submit the vessel, including required marine mammals logs and gear, to an inspection upon demand by an authorized Federal enforcement agent, or failure to adhere to the provisions of these regulations will subject the certificate holder to a revocation of his certificate and also subject the certificate holder, vessel, or master to the penalties provided for under the act.

(2) Encircling gear, purse seining involving the intentional taking of

marine mammals.—(i) Quotas:

(A) A certificated vessel may take marine mammals so long as the taking is an incidental occurrence in the course of normal commercial tuna purse seine fishing operations, and the fishing operations are under the immediate direction of a person who is the holder of a valid operator's certificate of inclusion; except that a vessel shall not encircle either.

(1) Pure schools of the coastal spotted dolphin (Stenella attenuata) stock, the Costa Rican spinner, and the eastern spinner dolphin (Stenella longirostris) stocks, or mixed schools including these stocks:

(2) Pure schools of any species of dolphin except the offshore spotted dolphin (Stenella attenuata) stock, the striped dolphin (Stenella coeruleoalba) species, and the oommon dolphin (Dephinus delphis) species; or

(3) Any other species or stock of marine mammals that do not have an allowable take as listed below or whose allowable take has been exceeded. The numbers of marine mammals that may be taken during each of the calendar years 1981–1985 by U.S. vessels in the course of commercial fishing operations will be limited as follows:

#### Quotas for Each Calendar Year 1981-85

Species/stock (management flint)	Take	Encyclement	Mortality 1
Spotted dolphin (northern offshore)	9,606,000	5,993,000	11,890
Spotted dolphin (southern offshore)	331,000	206,000	410
Spinner dolphin (northern whitebelly)	695,000	403,000	3,075
Spinner dolphin (southern whitebelly)	46,000	27.000	205
Common dolphin (northern tropical) 2	471,000	293,000	1,230
Common dolphin (central tropical)	927.000	298,000	2,870

Quotas for Each Calendar Year 1981-85 -- Continued

Species/stock (management unit)	Take	Encirclement	Mortality !
Common dolphin (southern tropical)	198.000	64 000	815
Striped dolphin (northern tropical)	4,000	3,000	82
Striped dolphin (central tropical)	7,000	5,000	103
Striped dolphin (southern tropical)	3,000	2,000	40

- <sup>1</sup>The U.S. allowable mortality in any of the years 1981~85 shall not exceed 20,500 <sup>3</sup>includes Baia nentic dolphin stock.

(B) The incidental mortality of marine mammals permitted under the general permit for each category will be monitored according to the methodology published in the Federal Register. The Assistant Administrator shall determine on the basis of the evidence available to him the date upon which the allowable quotas will be reached or exceeded. Notice of the Assistant Administrator's determination shall be published in the Federal Register not less than seven days prior to the effective date.

(C) If at the time the net skiff attached to the net is released from the vessel at the start of a set, and species or stocks that are prohibited from being taken are not reasonably observable, the fact that individuals of that species or stock are subsequently taken will not be cause for issuance of a notice of violation provided that all procedures required by the applicable regulations have been

followed.

(D) The general permit will be valid for a period not to exceed five years. The Assistant Administrator may, upon receipt of new information which in his opinion is sufficient to require modification of the general permit or regulations, propose to modify such after consultation with the Marine Mammal Commission, These modifications shall be consistent with and necessary to carry out the purposes of the act. Any modifications proposed by the Assistant Administrator involving changes in the quotas shall include the statements required by section 103(d) of the act. Modifications shall be proposed in the Federal Register and a public comment period shall be allowed. At the request of any interested person within 15 days after publication of the proposed modification in the Federal Register, the Assistant Administrator may hold a public hearing to receive and evaluate evidence in those circumstances where he has determined it to be consistent with and necessary to carry out the purposes of the act. Such request may be for a formal hearing on the record before an Administrative Law Judge. Within 10 days after receipt of the request for a public hearing, the Assistant Administrator shall provide the requesting party or parties with his decision. If a request is denied the Assistant Administrator shall state the

reasons for the denial. Within 10 days after receipt of a decision denying a request for a formal hearing, the requesting person may file a written notice of appeal with the Administrator. Based upon the evidence presented in the notice, the Administrator shall render a decision within 20 days from receipt of the notice.

(ii) General Conditions: (A) Marine mammals incidentally taken shall be immediately returned to the environment where captured without further injury. In addition to the specific porpoise rescue requirements established in Sec. 216.24(d)(2), the operators of purse seine vessels shall take every possible precaution to refrain from causing or permitting incidental mortality and serious injury of marine mammals. Operators shall not set on marine mammals when conditions of wind, sea state, visibility, or the number of marine mammals and/or fish prevent the effective use of backdown and other required porpoise rescue procedures.

(B) Operators may take such steps as are necessary to protect their gear or person from damage or threat of personal injury. However, all marine mammals taken in the course of commercial fishing operations shall be subject to the definition of "Incidental catch" in Sec. 216.3 above and may not be retained except where a specific permit has been obtained authorizing

the retention.

(C) Operators of all certificated vessels shall maintain daily marine mammal logs provided by the Regional Director, Southwest Region, National Marine Fisheries Service. Such logs shall be subject to inspection at the discretion of the Southwest Regional Director, or his designated personnel. Certified copies of completed marine mammal logs shall be mailed or delivered at the conclusion of each fishing voyage to the field office, Southwest Region, National Marine Fisheries Service, 1140 North Harbor Drive, Room 7, San Diego. California 92101, within 48 hours after arrival in any port. If no sets involving marine mammals were made during a voyage, a marine mammal log stating such shall be submitted.

(D) The vessel certificate holder shall notify the field office, Southwest Region, National Marine Fisheries Service, 1140 North Harbor Drive. Room 7, San Diego.

California 92101, telephone 714-293-6540, of any change of vessel operator within at least 48 hours prior to departing on the next scheduled trip.

(iii) Reporting Requirements: In accordance with Sec. 216.24(f) of these regulations, the following specific reporting procedures shall be required:

(A) The vessel certificate holder of each certificated vessel, who has been notified via certified letter from the National Marine Fisheries Service that his vessel is required to carry an observer, shall notify the field office, Southwest Region, National Marine Fisheries Service, San Diego, California. telephone 714-293-6540 at least five (5) days in advance of the vessel's departure on a fishing voyage to allow for observer placement. After a fishing voyage is initiated, the vessel is obligated to carry an observer until the vessel returns to port and one of the following conditions is met: (1) Unloads more than 400 tons of any species of tuna; or (2) unloads any amount of any species of tuna equivalent to one half of the vessel's carrying capacity; or (3) unloads its tuna catch after 40 days or more at sea from the date of departure. Further, the Regional Director, Southwest Region, may consider special circumstances for exemptions to this definition, provided written requests clearly describing the circumstances are received at leat ten (10) days prior to the termination or the initiation of a fishing voyage. A response to the written request will be made by the Regional Director within five (5) days after receipt of the request. A vessel whose vessel certificate holder has failed to comply with the provisions of this section may not engage in fishing operations for which a general permit is required.

(B) Masters of all certificated vessels carrying National Marine Fisheries Service observers shall allow observers to report, in coded form, information by radio concerning the accumulated take of marine mammals and other observer collected data at such times as specified by the Regional Director, Southwest Region. Individual vessel names and coded information reported by radio by the National Marine Fisheries Service observers shall remain confidential unless their release is authorized in writing by the operator of the vessel.

(C) The vessel certificate holder of each certificated vessel without an observer onboard, and fishing inside the Inter-American Tropical Tuna Commission's Yellowfin Regulatory Area is required to report within 48 hours prior to departure from port and within 48 hours after arrival in port, of the vessel's actual departure or arrival

date, including any changes in schedules that may occur after the original notification. The report shall include the name of the vessel and the location of the port of the scheduled departure or arrival, and shall be telephoned to 714—233—5511, the Southwest Regional Office's 24-hour answering service.

(D) The Regional Director. Southwest Region, will provide to the public, periodic quota status reports summarizing the estimated incidental porpoise mortality by U.S. vessels of individual species and stock.

(iv) Vessel Gear and Equipment Requirements: A vessel certificate issued pursuant to paragraph (c)(i) of this section will be valid only for a vessel equipped with a porpoise safety panel in its purse seine, and which uses the other gear, equipment, and procedures described herein. The vessel certificate holder shall be held responsible for providing and maintaining, in a functional and seaworthy condition, the required porpoise safety panels and all other required gear and equipment used in the course of catching and landing tuna. The requirement for the porpoise safety panel and other gear and equipment are

(A) Porpoise Safety Panel-Class I and II Vessels: For Class I purse seiners (400 short tons carrying capacity or less) and for Class II purse seiners (greater than 400 short tons carrying capacity, built before 1961), the porpoise safety panel shall be a minimum of 100 fathoms in length (as measured before installation), except that the minimum length of the panel in nets deeper than 10 strips shall be determined at a ratio of 10 fathoms in length for each strip that the net is deep. It shall be installed beginning 75 to 100 fathoms from the bow ortza, and shall extend toward the stern of the net protecting the perimeter of the backdown area. The perimeter of the backdown area is the length of corkline which begins at the outboard end of the last bow bunch pulled and continues to at least two-thirds the distance from the backdown channel apex to the stern tiedown point. The porpoise safety panel shall consist of small mesh webbing not to exceed 114" stretch mesh, extending from the corkline downward to a minimum depth equivalent to one strip of 100 meshes of 4¼" stretch mesh webbing.

(B) Porpoise Safety Panel—Class III Vessels: For Class III purse seiners (greater than 400 short tons carrying capacity, built after 1960), the porpoise safety panel shall be a minimum of 180 fathoms in length (as measured before installation). It shall be installed beginning 60 to 100 fathoms from the

bow ortza and shall extend toward the stern of the net protecting the perimeter of the backdown area. The perimeter of the backdown area is the length of corkline which begins at the outboard end of the last bowbunch pulled and continues to at least two-thirds the distance from the backdown channel apex to the stern tiedown point. The porpoise safety panel shall consist of small mesh webbing not to exceed 11/4" stretch mesh extending downward from the corkline and the base of the porpoise apron to a minimum depth equivalent to two strips of 100 meshes of 41/4" stretch mesh webbing.

(C) Porpoise Apron: Each Class III vessel shall have installed in its purse seine net, a triangular-shaped porpoise apron consisteing of small mesh not to exceed 114" stretch mesh, 85 to 95, fathoms in length, laced between the corkline and the porpoise safety panel. The bow end of the porpoise apron shall begin approximately 10 to 15 fathoms (depending on the depth of the net) outboard of the end of the third bunchline and extend toward the stern of the net such that the peak of the porpoise apron triangle shall coincide with the apex of the backdown channel in the net. The base of the porpoise apron shall be laced to the upper edge of the porpoise safety panel. The upper edges of the porpoise apron shall be tapered at a 5 mesh, 2 bar rate from each end such that the tapers intersect at the center of the porpoise apron. The depth of the porpoise apron at its center shall be 443 to 483 meshes.

(D) Porpoise Apron Approval: The porpoise apron shall be installed under the supervision of a National Marine Fisheries Service designated representative: A trial set(s) shall be conducted under supervision of a National Marine Fisheries Service designated representative after installation of the porpoise apron to insure proper installation and operation of the apron. During the trial set(s), the stern tiedown point and outboard bow bunchline mark shall be determined and permanently marked so as to be clearly visible from the vessel. Each time a super apron is reinstalled after removal from a net or the net depth is altered, the vessel and gear shall be made available for reinspection by an authorized National Marine Fisheries Service Inspector as specified by the Regional Director, Southwest Region, who may require that another trial set(s) be made for proper apron alignment and adjustment. The vessel certificate holder shall provide at least five (5) days advance notification to the field office. Southwest Region, National Marine

Fisheries Service, 1140 North Harbor Drive, Room 7, San Diego, California 92101, telephone 714–293–6540, of the time and place of installation of the porpoise apron system. The certificate of inclusion for any vessel whose certificate holder has failed to notify the National Marine Fisheries Service of the date of installation shall be invalid until completion of the apron inspection and trial set(s).

(E) Porpoise Safety Panel Markers: Each end of the porpoise safety panel and porpoise apron shall be identified with an easily distinguishable marker.

(F) Porpoise Safety Panel Hand Holds: Throughout the length of the corkline under which the porpoise safety panel and porpoise apron are located, hand hold openings are to be secured so that the insertion of a 1%" diameter cylindrical-shaped object meets resistance.

(G) Porpoise Safety Panel Corkline Hangings: Throughout the length of the corkline under which the porpoise safety panel and porpoise apron are located, corkline hangings shall be inspected by the vessel operator following each trip. Hangings found to have loosened to the extent that a cylindrical object with a 1%" diameter will not meet resistance when inserted between the cork and corkline hangings, must be tightened so that a cylindrical object with a 1%" diameter cannot be inserted.

(H) Bunchlines: Bunchlines, other than bow bunchlines, shall be arranged around the perimeter of the net to allow at least three towing points to be established near one-quarter, one-half, and three-quarter net from the bow ortza. A towing point must be established between two adjacent bunchlines; one bunchline reversed or unattached at both ends. Six bunchlines other than bow bunchlines are necessary to establish three towing points. The towing ends of all bunchlines which can be utilized as towing points shall be marked so as to be clearly visible to speedboat drivers. At least a 20-fathom length of corkline shall be free from bunchlines at the apex of the backdown channel.

(I) Speedboats: Certificated vessels engaged in fishing operations involving setting on marine mammals shall carry a minimum of two speedboats in operating condition. All speedboats carried aboard purse seine vessels and in operating condition shall be rigged with towing bridles and towlines. Speedboat hoisting bridles shall not be substituted for towing bridles.

(J) Rubber Raft: An inflatable rubber raft suitable to be used as a porpoise observation-and-rescue platform, shall be carried on all certificated vessels. (K) Facemask and Snorkel: At least two facemasks and snorkels shall be carried on all certificated vessels.

(L) Floodlights and Spotlight: All certificated vessels shall be equipped with adequate floodlights suitable for use in darkness to attract fish toward the main vessel and spotlight to intermittently illuminate the backdown

channel and apex. (M) Vessel certificate holders may petition for an exemption from the regulation regarding vessel gear and equipme. :or the purpose of experimenting with alternate gear or procedures designed to reduce incidental serious injury and mortalities of marine mammals in the course of commercial fishing. The petition shall be made in writing to the Director. Southwest Region, 300 South Ferry Street, Terminal Island, California 90731, and shall include detailed specifications of the proposed gear and procedure modifications. Modifications may be granted upon review and approval, on a trip by trip basis, only if a National Marine Fisheries Service designated representative is available and accompanies the vessel on the approved

(v) Vessel Inspection: (A) Annual: At least once during each calendar year, purse seine nets and other gear and equipment required by these regulations shall be made available for inspection by an authorized National Marine Fisheries Service Inspector as specified by the Regional Director, Southwest

Region.

(B) Reinspection: Purse seine nets and other gear and equipment required by these regulations shall be made available for reinspection by an authorized National Marine Fisheries Service Inspector as specified by the Regional Director, Southwest Region. The vessel certificate holder shall notify the Fleet Assistance Section, Southwest Region, National Marine Fisheries Service. 1140 N. Harbor Drive, Room 7, San Diego, California 92101, telephone 714-293-6540 of any net modification at least five (5) days prior to departure of the vessel on its next scheduled trip in order to determine whether a reinspection or trial set would be required.

(C) Failure to Pass Inspection: A certificate of inclusion for a vessel with gear which is not in compliance with these regulations or maintained in a functional and seaworthy condition. shall be invalid until such deficiencies in gear or conditions are corrected and approved by an authorized National Marine Fisheries Service Inspector.

(vi) Operator Training Requirements.
All operators shall maintain proficiency

sufficient to perform the procedures required herein, and must attend and satisfactorily complete a formal training session conducted under the auspices of the National Marine Fisheries Service in order to obtain their certificate of inclusion. At the training session an attendee shall be instructed concerning the provisions of the Marine Mammal Protection Act of 1972, the regulations promulgated pursuant to the Act, and the fishing gear and techniques which are required or will contribute to reducing serious injury and mortality of porpoise incidental to purse seining for tuna. Operators who have received a written certificate of satisfactory completion of training and who possess a current or previous calendar year certificate of inclusion will not be required to attend additional formal training sessions unless there are substantial changes in the Act, the regulations, or the required fishing gear and techniques. Additional training may be required for any operator who is found by the Regional Director, Southwest Region, to lack proficiency in the procedures required.

(vii) Marine Mammal Release Requirements: All operators shall use the following procedures during all sets involving the incidental taking of marine mammals in association with the capture and landing of tuna.

(A) Use of Speedboats: On every set involving marine mammals, two speedboats equipped for towing shall be immediately available. At least one shall be manned and in the water. The second one, may be manned or unmanned, and may remain either in the water or in the davits. Both shall be ready for use until backdown commences. Speedboats shall tow on bunchlines whenever net collapse begins or on the corkline if canopies of loose webbing form whenever necessary to prevent marine mammal entrapment.

(B) Backdown Procedure: Backdown shall be performed following a purse seine set in which marine mammals are captured in the course of catching and landing tuna, and shall be continued until it is no longer possible to remove live marine mammals from the net by this procedure. Thereafter, other release procedures required shall be continued until all live animals have been released from the net.

(C) Hand Rescue: During backdown, a minimum of two rescuers shall aid with the release of marine mammals. If live marine mammals remain in the net after backdown, a minimum of two rescuers shall hand release them.

(D) Prohibited Use of Sharp or Pointed Instrument: The use of a sharp or pointed instrument to remove any marine mammal from the net is prohibited.

(E) Use of Rubber Raft, Facemask, and Snorkel: A rubber raft suitable as a porpoise observation and rescue platform shall be launched inside the net near the time of tying down for the backdown maneuver. The raft shall be used by a crewman to assist the other rescuer(s) in disentangling and releasing live marine mammals from the net. The crewman in the raft shall use the facemask and snorkel to determine whether all live marine mammals are out of the net and, if they are not, make every effort to remove them before backdown is terminated. Taking into consideration the safety of all personnel, all live marine mammals that remain in the net after backdown shall be herded to areas where they can be easily released.

(F) Prohibited Brailing of Live Marine Mammals: All release procedures shall continue until all live marine mammals are removed from the net prior to initiating the brailing operation. Brailing live marine mammals from the net is

prohibited

(G) Prohibited Setting at Sundown: Onevery set involving marine mammals, the net skiff shall be released at least one and one-half hours before sunset; release of the net skiff after this time is

prohibited.
(H) Use of Lights: If the backdown maneuver or other required release procedures continue past one-half hour after sunset, lights shall be used to insure that release procedures are properly performed and that all live marine mammals are removed from the net. Floodlights shall be used to attract fish toward the main vessel. A spotlight shall be intermittently used to illuminate the backdown channel and apex until all live marine mammals are removed from

the ne

(viii) Penalties: Failure to comply with the provisions of the general permit or these regulations, including but not limited to: failure to submit upon demand to vessel, gear, equipment, or proficiency inspection or examination by authorized National Marine Fisheries Service personnel; falsification of any required logs and reports; or failure to satisfy the requirements of any provisions of these regulations will subject vessel owners, managing owners, masters, or operators to revocation of the vessel certificate of inclusion and/or to the right to be included under a general permit, and further subject vessel owners, managing owners, masters, and operators to penalties provided for under the Act. including revoking the right to be an operator as defined in Sec. 216.24(c)(1).

(3) Encircling Gear. Purse Seining Not Involving the Intentional Taking of Marine Mammals. (i) A certificate holder may take marine mammals so long as such taking is an incidental occurrence in the course of normal commercial fishing operations. Marine mammals taken incidental to commercial fishing operations shall be immediately returned to the environment where captured without further injury.

(ii) A certificate holder may take such steps as are necessary to protect his catch, gear, or person from depredation, damage or personal injury without inflicting death or injury to any marine

mammal.

(iii) Only after all means permitted by paragraph (d)(3)(ii) of this section have been taken to deter a marine mammal from depredating the catch, damaging the gear, or causing personal injury, may the certificate holder injure or kill the animal causing the depredation or immediate damage, or about to cause immediate personal injury; however, in no event shall a certificate holder kill or injure an Atlantic bottlenosed dolphin, Tursiops truncatus, under the provisions of this paragraph. A certificate holder shall not injure or kill any animal permitted to be killed or injured under this paragraph unless the infliction of such damage is substantial and immediate and is actually being caused at the time such steps are taken. In all cases, the burden is on the certificate holder to report fully and demonstrate that the animal was causing substantial and immediate damage or about to cause personal injury and that all possible steps to protect against such damage or injury as permitted by paragraph (d)(3)(ii) of this section were taken and that such attempts failed.

(iv) Marine mammals taken in the course of commercial fishing operations shall be subject to the provisions of Sec. 216.3 with respect to "Incidental catch." and may be retained except where a specific permit has been obtained

authorizing the retention.

(v) All certificate holders shall maintain logs of incidental take of marine mammals in such form as prescribed by the Assistant Administrator. All deaths or injuries to marine mammals occurring in the course of commercial fishing operations under the conditions of a general permit shall be immediately recorded in the log and reported in writing to the Regional Director, National Marine Fisheries Service, where a certificate application was made, or to an enforcement agent or other designated agent of the National Marine Fisheries Service, at the earliest opportunity but no later than five days after such occurrence, except that if a vessel at sea returns to port later than five days after such occurrence, then it shall be reported within forty-eight hours after arrival in port. Reports must include:

(A) the location, time, and date of the death or injury;

(B) the identity and number of marine mammals killed or injured; and

(C) a description of the circumstances which led up to and caused the death or

injury.

(vi) Failure to comply with the provisions of the general permit or certificate of inclusion including, but not limited to, failure to submit to an inspection of the vessel, marine mammal logs and required gear, upon demand by an authorized Federal enforcement agent, or failure to adhere to the provisions of these regulations will subject the certificate holder to a revocation of his certificate and also subject the certificate holder, vessel owner or master to the penalties provided for under the Act.

(4) Stationary Gear. (i) A certificate holder may take marine mammals so long as such taking is an incidental occurrence in the course of normal commercial fishing operations. Marine mammals taken incidental to commercial fishing operations shall be immediately returned to the environment where captured without

further injury.

(ii) A certificate holder may take such states as are necessary to protect his catch, gear, or person from depredation, damage or personal injury without inflicting death or injury to any marine mammal.

(iii) Only after all means permitted by paragraph (d)(4)(ii) of this section have been taken to deter a marine mammal from depredating the catch, damaging the gear, or causing personal injury, may the certificate holder injure or kill the animal causing the depredation or immediate damage, or about to cause immediate personal injury; however, in no event shall a certificate holder kill or injure an Atlantic bottlenosed dolphin. Tursiops truncatus, under the provisions of this paragraph. A certificate holder shall not injure or kill any animal permitted to be killed or injured under this paragraph unless the infliction of such damage is substantial and immediate and is actually being caused at the time such steps are taken. In all cases, the burden is on the certificate holder to report fully and demonstrate that the animal was causing substantial and immediate damage or about to cause personal injury and that all possible steps to protect against such damage or injury as permitted by

paragraph (ii) were taken and that such attempts failed.

(iv) Marine mammals taken in the course of commercial fishing operations shall be subject to the provisions of Sec. 216.3 with respect to "Incidental catch," and may not be retained except where a specific permit has been obtained authorizing the retention.

(v) All certificate holders shall maintain logs of incidental take of marine mammals in such form as prescribed by the Assistant Administrator, All deaths or injuries to marine mammals occurring in the course of commercial fishing operations under the conditions of a general permit shall be immediately recorded in the log and reported in writing to the Regional Director, National Marine Fisheries Service, where a certificate application was made, or to an enforcement agent or other designated agent of the National Marine Fisheries Service, at the earliest opportunity but no later than five days after such occurrence, except that if a vessel at sea returns to port later than five days after such occurrence, then it shall be reported within forty-eight hours after arrival in port. Reports must include:

(A) the location time, and date of the

death or injury;

(B) the identity and number of marine mammals killed or injured; and (C) a description of the circumstances

(C) a description of the circumstances which led up to and caused the death or iniury.

(vi) Failure to comply with the provisions of the general permit or certificate of inclusion including, but not limited to, failure to submit to an inspection of the vessel, marine mammal logs and required gear, upon demand by an authorized Federal enforcement agent, or failure to adhere to the provisions of these regulations will subject the certificate holder to a revocation of his certificate and also subject the certificate holder, vessel, owner or master to the penalties provided for under the Act.

(5) Other Gear. (i) A certificate holder may take marine mammals so long as such taking is an incidental occurrence in the course of normal commercial fishing operations. Marine mammals taken incidental to commercial fishing operations shall be immediately returned to the environment where captured without further injury.

(ii) A certificate holder may take such steps as are necessary to protect his catch, gear, or person from depredation, damage or personal injury without inflicting death or injury to any marine mammal.

(iii) Only after all means permitted by paragraph (d)(5)(ii) of this section have

been taken to deter a marine mammal from depredating the catch, damaging the gear, or causing personal injury, may the certificate holder injure or kill the animal causing the depredation or immediate damage, or about to cause immediate personal injury; however, in no event shall a certificate holder kill or injure an Atlantic bottlenosed dolphin. Tursions truncatus, under the provisions of this paragraph. A certificate holder shall not injure or kill any animal permitted to be killed or injured under this paragraph unless the infliction of such damage is substantial and immediate and is actually being caused at the time such steps are taken. In all cases, the burden is on the certificate holder to report fully and demonstrate that the animal was causing substantial and immediate damage or about to cause personal injury and that all possible steps to protect against such damage or injury as permitted by paragraph (d)(5)(ii) of this section were taken and that such attempts failed.

(iv) Marine mammals taken in the course of commercial fishing operations shall be subject to the provisions of Sec. 216.3 with respect to "Incidental catch." and may not be retained except where a specific permit has been obtained

authorizing the retention.

(v) All certificate holders shall maintain logs of incidental take of marine mammals in such form as prescribed by the Assistant Administrator, All deaths or injuries to marine mammals occurring in the course of commercial fishing operations under the conditions of a general permit shall be immediately recorded in the log and reported in writing to the Regional Director, National Marine Fisheries Service, where a certificate application was made, or to an enforcement agent. or other designated agent of the National Marine Fisheries Service, at the earliest opportunity but no later than five days after such occurrence, except that if a vessel at sea returns to port later than five days after such occurrence, then it shall be reported within forty-eight hours after arrival in

port. Reports must include:
(A) the location, time, and date of the death or injury;

(B) the identity and number of marine mammals killed or injured; and

(C) a description of the circumstances which led up to and caused the death or injury.

(vi) Failure to comply with the provisions of the general permit or certificate of inclusion including, but not limited to, failure to submit to an inspection of the vessel, marine mammal logs and required gear, upon demand by an authorized Federal enforcement

agent, or failure to adhere to the provisions of these regulations will subject the certificate holder to a revocation of his certificate and also subject the certificate holder, vessel, or master to the penalties provided for under the Act.

(e) Importation: (1) It shall be illegal to import into the United States any fish. whether fresh, frozen or otherwise prepared, if such fish were caught in a manner prohibited by these regulations or in a manner that would not be allowed in circumstances where a person subject to the jurisdiction of the United States would be required to have a certificate of inclusion in a general permit hereunder, whether or not any marine mammals were in fact taken incidental to the catching of the fish. unless the Assistant Administrator makes a finding and publishes such finding in the Federal Register, that such fishing, although not in conformity with the specific requirements of these regulations, is accomplished in a manner which does not result in an incidental mortality and serious injury rate in excess of that which results from fishing operations under these regulations.

(2) The following fish and categories of fish, which the Assistant Administrator has determined are involved with commercial fishing operations which cause the death or injury of marine mammals, are subject to the prohibitions and documentation requirements of this section:

(i) Salmon and halibut. The following U.S. Tariff Schedule Item Numbers identify these categories of salmon and halibut products which are imported into the United States and are to be covered by the documentation and certification regulations of § 216.24(e)[3]:

110.20-25 Halibut, fresh or chilled.

110.20-30 Halibut, frozen.

110.20-45 Salmon, fresh or chilled

110.10-50 Salmon, frozen.

110.70-40 Halibut, other—except portion controlled steaks.

111.48-00 Salmon, salted.

111.88-00 Salmon, smoked or kippered. 112.18-00 Salmon, preserved, not in oil.

(ii) Yellowfin tuna. The following U.S. Tariff Schedule Item Numbers identify the categories of tuna and tuna products under which yellowfin tuna is imported ' into the United States, and are subject to the importation restrictions of paragraph (e)(4) of this section after December 31, 1977:

110.10-20 Tuna; yellowfin, whole fish. 110.10-25 Tuna; yellowfin, eviscerated, head

on. 110.10–30 Tuna: yellowfin, eviscerated, head off.

110.10-37 Tuna: yellowfin, other.

112.30-40 Tuna; canned, other than white meat, no oil—except cans marked as other than yellowfin tuna in a manner approved in advance by the Assistant Administrator.

112.34-00 Tuna: canned, other, no oil except cans marked as other than yellowfin tuna in a manner approved in advance by the Assistant Administrator.

112.90-00 Tuna; canned, other, no oil except cans marked as other than yellowfin tuna in a manner approved in advance by the Assistant Administrator.

(3) Salmon and Halibut. All fish and categories of fish listed in paragraph (e)(2)(i) of this section shall be denied entry into the United States unless accompanied by a separate Fisheries Certificate of Origin (Standard Form 369-1) from each country whose flag vessels caught fish involved in the importation. The Fisheries Certificate of Origin should include the following information:

(i) The country of origin; and (ii) The identity and quantity of fish;

and, either

(iii) After the Assistant Administrator has published the finding referred to in paragraph (e)(1) of this section, a statement from a responsible official of the country of origin that the fishing technology permitted by the country of origin with respect to the species of fish presented for importation into the United States does not result in a rate of serious injury or death to marine mammals in excess of that which results from U.S. commercial fishing operations as prescribed by these regulations. Country of origin for the purposes of this section shall mean the country under whose flag the fish catching vessels are documented and whose fish are a part of any cargo or shipment of fish to be imported into the U.S. regardless of any transshipments; or

transshipments; or
(iv) A statement by a responsible
official of the country of origin or the
master of the vessel which caught the
fish that such fish were not caught in a
manner prohibited for U.S. fishermen by
these regulations. The statement shall
identify the species, quantity, and
exporter of the fish to which the
statement refers; or

(v) Any nation may certify to the Assistant Administrator either (A) that all of its vessels fishing under its flag are fishing in conformance with these regulations; or (B) a list of the vessels, by name and official number, fishing under such nation's flag which are fishing in conformance with these regulations; or (C) that all of the vessels fishing under such nation's flag, with the exception of any vessels specifically listed by name and official number, are fishing in conformance with these regulations. If methods (B) or (C) are

used, the shipping documentation must also show the name and official number of the vessel which caught the fish presented for importation. The Assistant Administrator may then make a finding. and publish such finding in the Federal Register, that fish imports listed in paragraphs (e)(2)(i) from a nation or from an identified segment of a nation's fishing fleet, are exempted from the documentation provisions of this section

(4)(i) Yellowfin tuna: All shipments of fish and products listed in paragraph (e)(2)(ii) of this section, from any nation, shall not be entered into the United States for consumption or withdrawn from warehouse for consumption unless a finding has been made pursuant to paragraph (e)(5)(i) of this section, and unless accompanied by the following documentation: (A) A separate Yellowfin Tuna Certificate of Origin (Standard Form 370-1) and (B) a bill of lading from each country whose flag vessels caught yellowfin tuna involved in the importation. (ii) The Yellowfin Tuna Certificate of Origin must include the following information: (A) Country of origin of the fishing vessel(s) involved; (B) Exporter (name and address); (C) Consignee (name and address); (D) Identity and quantity of the yellowfin tuna to be imported, listed by U.S. Tariff Schedule Number; (E) Name of vessel(s) which caught the vellowfin tuna; (F) Fishing method used (i.e., purse seine, longline, pole and line, etc.); (G) Other documentation as may be required by the Assistant Administrator, subsequent to granting a finding in paragraph (e)(5) of this section; (H) Must be signed by either a responsible government official of the country whose flag vessel caught the fish or the vessel master, below the following certification statements:

I certify that the vellowfin tuna described in (D) above was caught by flag vessels of a country either, (1) not required to obtain a finding from the United States Department of Commerce (National Marine Fisheries Service) under 50 CFR 216.24(e)(5), and the fish was not caught in a manner prohibited for United States fishermen by the United States Marine Mammal Regulations 50 CFR 216.24(d)(2), or (2) which has been found by the United States Department of Commerce (National Marine Fisheries Service) to be in conformance with the United States Marine Mammal Regulations 50 CFR 216.24(e)(5).

I certify that the above information is complete, true and correct to the best of my knowledge and belief. I understand that my making a false statement may subject me to the criminal penalties under the Marine Mammal Protection Act of 1972.

 Must also be signed by the exporter, under the following declaration:

The undersigned hereby declares that, based on the above statements, the yellowfin tuna herein offered for importation into the United States, was caught by flag vessels of (country) in conformance with the United States Marine Mammal Regulations 50 CFR

(5)(i) Any tuna or tuna products in the classifications listed in paragraph (e)(2)(ii) of this section from countries of origin (as documented under (e)(4) above) whose vessels operate in the yellowfin tuna purse seine fishery in the eastern tropical Pacific Ocean, as determined by the Assistant Administrator: shall not be entered into the United States for consumption or subsequently withdrawn from warehouse for consumption unless the Assistant Administrator makes a finding in consultation with the U.S. Department of State, and publishes such finding in the Federal Register that fishing operations in the country of origin are conducted in conformance with U.S. regulations and standards as stated in paragraph (d)(2) of this section. The Assistant Administrator may make a finding that, although not in conformity with these regulations, such fishing is accomplished in a manner which does not result in an incidental mortality and serious injury in excess of that which result from U.S. fishing operations under these regulations. Upon such a finding unloading may be allowed. Country of origin for the purposes of this section (Sec. 216.24(e)) shall mean the country under whose flag the fish catching vessels are documented and whose fish are a part of any cargo or shipment of fish to be imported into the U.S. regardless of any transshipments.

(ii) Countries of origin desiring to obtain a finding which will allow the importation of products listed in paragraph (e)(2)(ii) of this section must submit, by appropriate government official, to the Assistant Administrator, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce, Washington, D.C. 20235, the following information: (A) A statement of the quantity and type (identified by U.S. Tariff Schedule Item Numbers listed in paragraph (e)(2)(i) of this section) of fish or fish products expected to be imported into the U.S.; (B) A detailed description of the fishing technology and procedures utilized in tuna purse seine fishing to protect marine mammals so that a determination of conformance with Sec. 216.24(d)(2) of these regulations can be made, or the effectiveness of any other equivalent technology or procedures can be assessed; (C) A statement of the number of marine mammals killed or

seriously injured (by species) incidental to the yellowfin tuna purse seine operations on porpoise for the previous vear, and the manner in which the information was obtained (logbooks, observers, interviews, or other procedures); (D) A statement of the number of marine mammals which will be allowed to be killed or seriously injured annually incidental to yellowfin tuna purse seine operations; (E) A statement of the procedures to be required, including quotas and other controls which will meet the U.S. requirements to limit the level of mortality with specific reference to any species or stock designated as depleted; and (F) A list of vessels which may be involved in the taking of marine mammals incidental to yellowfin tuna purse seining.

(iii) The Assistant Administrator will review each nation's findings annually upon receipt of information required under paragraph (e)(5)(ii) which pertains to a preceeding calendar year, and a request of a continuation of a finding by the country of origin. This information . should be submitted by September 1 preceding the calendar year for which the exportation is requested. The Assistant Administrator may require verification of statements made in connection with requests to allow importations. The Assistant Administrator will reconsider a finding upon a request from, and the submission of additional information from, the country of origin.

(6) Fish refused entry. If fish is denied entry under the provisions of Sec. 216.24(e)(3) or Sec. 216.24(e)(4), the District Director of Customs shall refuse to release the fish for entry into the United States and shall issue a notice of such refusal to the importer or

consignee.

(7) Release under bond. Provided however, that fish not accompanied or covered by the required documentation or certification when offered for entry may be entered into the United States if the importer or consignee gives a bond on Customs Form 7551, 7553, or 7595 for the production of the required documentation or certification. The bond shall be in the amount required under 19 CFR 25.4(a). Within 90 days after such Customs entry, or such additional period as the District Director of Customs may allow for good cause shown, the importer or consignee shall deliver a copy of the required documentation or certification to the District Director of Customs, and an original of the required documentation or a copy of the certification to the Regional Director of the National

Marine Fisheries Service, unless the District Director of Customs has received notification from the National Marine Fisheries Service that the fish is covered by a certification. If such documentation, certification, or notification is not delivered to the District Director of Customs for the port of entry of such fish within 90 days of the date of Customs entry or such additional period as may have been allowed by the District Director of Customs for good cause shown, the importer or consignee shall redeliver or cause to be redelivered to the District Director of Customs those fish which were released in accordance with this paragraph. In the event that any such fish is not redelivered within 30 days following the date specified in the preceding sentence, liquidated damages shall be assessed in the full amount of bond given on Form 7551. When the transaction has been charged against a bond given on Form 7553 or 7595, liquidated damages shall be assessed in the amount that would have been demanded under the preceding sentence under a bond given on Form 7551. Fish released for entry into the United States through use of the bonding procedure provided in this paragraph shall be subject to the civil and criminal penalties and the forfeiture provisions provided for under the Act if (i) the required documentation or certification is not delivered to the Regional Director of the National Marine Fisheries Service within 90 days of the date of Customs entry, or such additional period as may have been allowed by the District Director of Customs for good cause shown, or (ii), the required certification is not on file in the office of the Assistant Administrator, National Marine Fisheries Service, National Oceanic and Atomspheric Administration, Department of Commerce, Washington, D.C. 20235. within this 90 day period or such additional period as may have been allowed by the District Director of Customs for good cause shown. Fish refused entry into the United States shall also be subject to the civil and criminal penalties and the forfeiture provisions provided for under the Act.

(8) Disposition of fish refused entry into the United States; redelivered fish. Fish which is denied entery under Sec. 218.24(e)[3] or Sec. 218.24(e)[4] or which is redelivered in accordance with Sec. 218.24(e)[7] and which is not exported under Customs supervision within 90 days from the date of notice of refusal of admission or date of redelivery shall be disposed of under Customs laws and regulations. Provided however, that any

disposition shall not result in an introduction into the United States of fish caught in violation of the Marine Mammal Protection Act of 1972.

(f) Observers.—(1) The vessel certificate holder of any certification by the National Marine Fisheries Service, allow an observer duly authorized by the Secretary to accompany the vessel on any or all regular fishing trips for the purpose of conducting research and observing operations, including collecting information which may be used in civil or criminal penalty proceedings. forfeiture actions, or permit or certificate sanctions.

(2) Research and observation duties shall be carried out in such a manner as to minimize interference with commercial fishing operations. The navigator shall provide true vessel locations by latitude and longitude, accurate to the nearest minute, upon request by the observer. No owner, master, operator, or crew member of a certificated vessel shall impair or in any way interfere with the research or observations being carried out.

(3) Marine mammals killed during fishing operations which are accessible to crewmen and requested from the certificate holder or master by the observer shall be brought aboard the vessel and retained for biological processing, until released by the observer for return to the ocean. Whole marine mammals designated as biological specimens by the observer shall be retained in cold storage aboard the vessel until retrieved by authorized personnel of the National Marine Fisheries Service when the vessel returns to port for unloading.

(4) The Secretary shall provide for the payment of all reasonable costs directly related to the quartering and maintaining of such observers on board such vessels. A vessel certificate holder who has been notified that the vessel is required to carry an observer, via certified letter from the National Marine Fisheries Service, shall notify the office from which the letter was received at least five days in advance of the fishing voyage to facilitate observer placement. A vessel certificate holder who has failed to comply with the provisions of this section may not engage in fishing operations for which a general permit is required.

(5) It is unlawful for any person to forcibly assault, impede, intimidate, interfere with, influence or attempt to influence an observer placed aboard a yearsal

(g) Penalties and rewards: Any person or vessel subject to the jurisdiction of

the United States shall be subject to the penalties provided for under the Act for the conduct of fishing operations in violation of these regulations. The Secretary shall recommend to the Secretary of the Treasury that an amount equal to one-half of the fine incurred but not to exceed \$2,500 be paid to any person who furnishes information which leads to a conviction for a violation of these regulations. Any officer, employee, or designated agent of the United States or of any State or local government who furnishes information or renders service in the performance of his official duties shall not be eligible for payment under this section.

(FR Doc. 80-33529 Filed 10-30-80: 8:45 am) BILLING CODE 3510-22-M





